Andrew Steinberg <andrew.steinberg @lepetoma neinc.com>

01/19/2012 03:43 PM

To Nicole Wood cc Michael Berkoff

bcc

Subject LePetomane XXIII: Kalamazoo Site Fee Application L11-005

Nicole -

Linked to this email, please find the detailed time and expense records for the administrative and environmental expenses incurred by the Lyondell Environmental Custodial Trust (the "Trust") for the period October 1, 2011 through December 31, 2011.

The requested payments total the sum of \$9,813.29 and are in compliance with the approved Amended 2011 Trust Budget for the Kalamazoo site.

Please see the linked PDF for payment details, a summary of the various fees and expenses incurred during the period, and budget tracking tables for site-specific administrative and environmental services.

As the fees and expenses are in compliance with the Trust Budget, the invoices will be paid from the administrative and environmental accounts, as indicated, unless the Trust receives an objection prior to January 31, 2012.

To obtain the Fee Application package including all invoice back-up, follow this link:

https://lepetomaneinc.sharefile.com/d/sdd4479e7e5b4e89b

Upon download, the file L11-005-MI.PDF should be opened first.

There will be one additional Fee Application transmitted in February that will capture all remaining 2011 charges. I will also be in contact with you to discuss the 2012 Trust budget. As always, please contact me with any questions.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

Andrew Steinberg @lepetoma neinc.com>

03/13/2012 12:51 PM

To Nicole Wood cc Michael Berkoff

bcc

Subject LePetomane XXIII, Kalamazoo Site : Compensation and Expense Report L11-006

Nicole -

Linked to this email, please find for your review the detailed time and expense records for the administrative and environmental expenses incurred by the Lyondell Environmental Custodial Trust (the "Trust") for the period July 1, 2011 through December 31, 2011.

The requested payments total the sum of \$99,962.08.

Please see the linked PDF for payment details, a summary of the various fees and expenses incurred during the period, and budget tracking tables for site-specific administrative and environmental services.

To obtain the Compensation and Expense Report package including all invoice back-up, follow this link:

https://lepetomaneinc.sharefile.com/d/s923efdf958a43fcb

Upon download, the file <u>L11-006-MI.PDF</u> should be opened first.

Also attached to this email is a site financial and activity summary which includes a draft three-year scope for your review. I'd like to setup a call to review the document and capture any feedback prior to distributing the draft 2012-2014 budget for the site. Would you have availability this Thursday or Friday afternoon?

Please advise.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601

PDF

andrew.steinberg@lepetomaneinc.com 2011-YEAREND-MI.PDF

Michael Berkoff/R5/USEPA/US

03/27/2012 01:27 PM

To Andrew Steinberg

cc Nicole Wood

bcc

Subject Re: LePetomane XXIII, Kalamazoo Site : Compensation and

Expense Report L11-006

I am available until 4:30 pm today.

Michael Berkoff Remedial Project Manager U.S. EPA Region 5 Superfund Division Remedial Response Section #3 Phone:(312) 353-8983 Fax:(312) 582-5160

-----Andrew Steinberg <andrew.steinberg@lepetomaneinc.com> wrote: -----

To: Nicole Wood/R5/USEPA/US@EPA

From: Andrew Steinberg <andrew.steinberg@lepetomaneinc.com>

Date: 03/27/2012 01:18PM

Cc: Michael Berkoff/R5/USEPA/US@EPA

Subject: Re: LePetomane XXIII, Kalamazoo Site: Compensation and Expense Report L11-006

Nicole -

I'm out of the office at meetings from 1:30 until 4:00 today. I could do it late in the afternoon or tomorrow

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

On Mar 27, 2012, at 1:10 PM, Nicole Wood wrote:

Hi, Andy.

Are you available for a quick call today at 2:30?

Nicole Wood-Chi Assistant Regional Counsel U.S. EPA Region 5 77 W. Jackson Blvd. C-14J Chicago, IL 60604 312-886-0664

<graycol.gif>Andrew Steinberg ---03/27/2012 10:46:37 AM---Nicole - Do you have availability this week for a quick call to discuss 2012 budgeting?

From: Andrew Steinberg andrew.steinberg@lepetomaneinc.com>

Nicole -

Do you have availability this week for a quick call to discuss 2012 budgeting?

I'd like to get this in the bag before April:)

Please provide a few times that work for you and/or Michael.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

Begin forwarded message:

From: Andrew Steinberg <andrew.steinberg@lepetomaneinc.com>

Subject: LePetomane XXIII, Kalamazoo Site: Compensation and Expense

Report L11-006

Date: March 13, 2012 12:51:06 PM CDT

To: Nicole Wood < Wood. Nicole@epamail.epa.gov >

Cc: Michael Berkoff < Berkoff. Michael@epamail.epa.gov >

Bcc: David Smith-Watts < Smith-Watts. David@epamail.epa.gov>

Nicole -

Linked to this email, please find for your review the detailed time and expense records for the administrative and environmental expenses incurred by the Lyondell Environmental Custodial Trust (the "Trust") for the period July 1, 2011 through December 31, 2011.

The requested payments total the sum of \$99,962.08.

Please see the linked PDF for payment details, a summary of the various fees and expenses incurred during the period, and budget tracking tables for site-specific administrative and environmental services.

To obtain the Compensation and Expense Report package including all invoice back-up, follow this link:

https://lepetomaneinc.sharefile.com/d/s923efdf958a43fcb

Upon download, the file <u>L11-006-MI.PDF</u> should be opened first.

Also attached to this email is a site financial and activity summary which includes a draft three-year scope for your review. I'd like to setup a call to review the document and capture any feedback prior to distributing the draft 2012-2014 budget for the site. Would you have availability this Thursday or Friday afternoon?

Please advise.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601

andrew.steinberg@lepetomaneinc.com(See attached file: 2011-YEAREND-MI.PDF)

<2011-YEAREND-MI.PDF>

Andrew Steinberg <andrew.steinberg@lepetoma neinc.com>

03/29/2012 03:07 PM

To Nicole Wood, Michael Berkoff

СС bcc

Subject Kalamazoo Site Draft Budget

Nicole / Michael -

I have attached to this email a draft 2012 budget for the Kalamazoo site which includes detailed task information provided by ENVIRON at your request.

Please indicate if EPA approves of the budget, or alternatively, please get in touch with any questions.

Regarding the situation with Consumers and the utility poles, it appears that the Trust is awaiting feedback from EPA and/or Consumers after the last phone call was had with Tanya O'Neill (Trust's attorney) a few weeks back. If you'd like to pass along the contact at the utility, I'd be happy to get things moving.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601



andrew.steinberg@lepetomaneinc.com 2012-MI-032812.PDF

Andrew Steinberg <andrew.steinberg @lepetoma neinc.com>

04/03/2012 05:24 PM

To Nicole Wood cc Michael Berkoff

bcc

Subject Re: Kalamazoo Site Draft Budget

Nicole -

Curious if you've had an opportunity to review the financial package and draft 2012 budget? The Trust would like to send the entire package to DOJ before the end of the week. Please advise if I can answer any questions.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

On Mar 29, 2012, at 3:07 PM, Andrew Steinberg wrote:

Nicole / Michael -

I have attached to this email a draft 2012 budget for the Kalamazoo site which includes detailed task information provided by ENVIRON at your request.

Please indicate if EPA approves of the budget, or alternatively, please get in touch with any questions.

Regarding the situation with Consumers and the utility poles, it appears that the Trust is awaiting feedback from EPA and/or Consumers after the last phone call was had with Tanya O'Neill (Trust's attorney) a few weeks back. If you'd like to pass along the contact at the utility, I'd be happy to get things moving.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

<2012-MI-032812.PDF>

Andrew Steinberg <andrew.steinberg @lepetoma neinc.com>

05/17/2012 02:23 PM

To Nicole Wood

cc Jay Steinberg, David Smith-Watts, pierre.armand, Michael Berkoff

bcc

Subject Re: LePetomane XXIII, Kalamazoo Site : Compensation and Expense Report L11-006

Nicole -

Thank you. Nothing else is required from Region 5 prior to DOJ submittal. Appreciate the prompt turn-around.

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

On May 17, 2012, at 2:15 PM, Nicole Wood wrote:

Hi, Andy.

Please see email below.

Region 5 approves the budget.

Is there something else you need from me in this regard, or will this email suffice?

Nicole 312-886-0664

---- Forwarded by Nicole Wood/R5/USEPA/US on 05/17/2012 02:14 PM -----

From: Michael Berkoff/R5/USEPA/US To: Nicole Wood/R5/USEPA/US@EPA

Date: 05/17/2012 10:54 AM

Subject: Re: Fw: LePetomane XXIII, Kalamazoo Site: Compensation and Expense Report L11-006

Nicole,

I have reviewed these costs in greater detail and am now prepared to approve the budget. Please convey this to the appropriate parties.

Michael

Michael Berkoff Remedial Project Manager U.S. EPA Region 5 Superfund Division Remedial Response Section #3 Phone:(312) 353-8983 Fax:(312) 582-5160

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov To JAMES SARIC

СС bcc

07/03/2012 12:00 PM

Subject Plainwell stability presentation

Jim,

Attached is the presentation I shared with DEQ and DNR management today regarding Plainwell. I'm sure we will want to discuss my managements desire to meet with EPA. Just so you know, some of the names being thrown around include you, Rick, Wendy C., and Leslie.

Paul Bucholtz MDEQ-RD Superfund Section



517-373-8174 Stream width-7-3-12.pdf

<Jeff.Keiser@CH2M.com>

To JAMES SARIC

07/03/2012 01:33 PM

cc bcc

Subject FW: Revised ASTM comments

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: White, Patricia/BOS

Sent: Tuesday, July 03, 2012 1:33 PM

To: Keiser, Jeff/MKE **Cc:** Dillon, Frank/LSG

Subject: Revised ASTM comments

Jeff – here are the revised ASTM comments with our changes incorporated. I tweaked a few of Frank's responses. You can use this version for the July 6 draft that you plan to send to Jim (with any additional tweaks based on our call with Jim today).

Patty

Patty

Patty White CH2M HILL Direct 617.721.2527 Fax 773.693.4707 www.ch2mhill.com

Comments on ASTM 07-03-12.docx

JAMES SARIC/R5/USEPA/US

To Jeff.Keiser, Patricia.White, Frank.Dillon

СС

07/03/2012 01:45 PM

bcc

Subject Fw: Plainwell stability presentation

FYI

-----Forwarded by JAMES SARIC/R5/USEPA/US on 07/03/2012 01:43PM -----

To: JAMES SARIC/R5/USEPA/US@EPA

From: "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>

Date: 07/03/2012 12:02PM

Subject: Plainwell stability presentation

(See attached file: Stream width-7-3-12.pdf)

Jim,

Attached is the presentation I shared with DEQ and DNR management today regarding Plainwell. I'm sure we will want to discuss my managements desire to meet with EPA. Just so you know, some of the names being thrown around include you, Rick, Wendy C., and Leslie.

Paul Bucholtz

MDEQ-RD Superfund Section



517-373-8174 Stream width-7-3-12.pdf

JAMES SARIC/R5/USEPA/US

To Jeff.Keiser

07/03/2012 04:08 PM

cc bcc

Subject Re:

I agree we send our comments with our language.

On the RI we will need Frank to look at the revised language as soon as we get it.

----<Jeff.Keiser@CH2M.com> wrote: -----

To: JAMES SARIC/R5/USEPA/US@EPA From: <Jeff.Keiser@CH2M.com> Date: 07/03/2012 03:49PM

Subject:

What mike is describing is similar to our comment, we don't put in a time frame in the rao

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct - 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.comhttp://www.jkeiser@ch2m.com/
Solutions without Boundaries

<Jeff.Keiser@CH2M.com>

To JAMES SARIC

07/05/2012 03:53 PM

cc Patricia. White, Frank. Dillon, Beth. Rohde

bcc

Subject Comments on the Area 1 ASTM

Jim attached are CH2M HILL's comments on the Area 1 ASTM. We have incorporated the revisions discussed on our July 3 conference call. If you have any questions please contact me at the number listed below.

Thanks JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries





 $Area_1_Comments_on_ASTM_7-5-2012_submittal.pdf\ Area_1_Comments_on_ASTM_7-5-2012_submittal.docx$

JAMES SARIC/R5/USEPA/US

To Patricia.White

cc Frank.Dillon, Jeff.Keiser

07/05/2012 04:04 PM

Subject RE: Plainwell stability presentation

I agree. However, I am not sure all parties including our removal group believe in the findings regarding stability. The bank inspections the last 2 years show the river banks are stable and not eroding. However, the MDEQ stream team believes the channel is unstable and did not meet the objective of the removal action. MDEQ believes the dimensions of the current channel in Plainwell indicate channel instability, GP, Weyerhaeuser and others have stated that if there is no bank erosion is the channel really unstable. Also, given the fact that the dam was only removed 3 years ago, it may take more time before you see true channel stabilization. Anyhow, I agree that we need to consider channel stability and bank erosion in the FS and all remedies should make the case that the river in its existing form is stable and is not going to further erode the banks. If erosion does occur future bank stabilization measures may be necessary.

bcc

Jim

-----< Patricia. White@CH2M.com> wrote: -----

To: JAMES SARIC/R5/USEPA/US@EPA, <Jeff.Keiser@CH2M.com>, <Frank.Dillon@CH2M.com>

From: <Patricia.White@CH2M.com>

Date: 07/05/2012 08:04AM

Subject: RE: Plainwell stability presentation

This is a very interesting presentation – and reinforces the need to address bank stability in more detail in the Area 1 FS.

Patty

From: JAMES SARIC [mailto:Saric.James@epamail.epa.gov]

Sent: Tuesday, July 03, 2012 2:45 PM

To: Keiser, Jeff/MKE; White, Patricia/BOS; Dillon, Frank/LSG

Subject: Fw: Plainwell stability presentation

FYI

----Forwarded by JAMES SARIC/R5/USEPA/US on 07/03/2012 01:43PM ----

To: JAMES SARIC/R5/USEPA/US@EPA

From: "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>

Date: 07/03/2012 12:02PM

Subject: Plainwell stability presentation

(See attached file: Stream width-7-3-12.pdf)

Jim,

Attached is the presentation I shared with DEQ and DNR management today regarding Plainwell. I'm sure we will want to discuss my managements desire to meet with EPA. Just so you know, some of the names being thrown around include you, Rick, Wendy C., and Leslie.

Paul Bucholtz

MDEQ-RD Superfund Section

517-373-8174

<Jeff.Keiser@CH2M.com>

07/10/2012 04:30 PM

To Frank.Dillon, Patricia.White

cc JAMES SARIC

bcc

Subject FW: Proposed responses to comments received in the Area 1 SRI Conditional Approval

Ok, Jim beat me forwarding the info. Take a look at the info provided and let me know if you think you will be prepared to discuss this by 11:30 EST Jim that is 10:30 our time. It is 23 pages so may take some time to look at. Jim is out tomorrow afternoon and we would like to get our responses back to GP by Thurs. Jim is out until the 23rd after that so we are in a crunch.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: Erickson, Michael [mailto:Michael.Erickson@arcadis-us.com]

Sent: Tuesday, July 10, 2012 3:07 PM

To: JAMES SARIC; Keiser, Jeff/MKE; BUCHOLTZP@michigan.gov; Griffith, Garry T.

Subject: Proposed responses to comments received in the Area 1 SRI Conditional Approval

Jim,

As we discussed, attached is are response to comments included in the Area 1 SRI Report Conditional Approval. Please review and let us know if our proposed means of addressing USEPA's comments are acceptable to incorporate into the finalized report.

Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

www.arcadis-us.com

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restricted by law.Draft Area 1 SRI RTC 7-9-12-final.pdf

<Jeff.Keiser@CH2M.com>

07/12/2012 07:09 AM

To JAMES SARIC

cc Ken.Kern, Patricia.White, Frank.Dillon, KingTW

bcc

Subject FW: Question about another alternative approach for wren

BAFs

Jim, Patty forwarded Arcadis response to John Kern. Below are his comments.

Thanks JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: John Kern [mailto:jkern@kernstat.com] **Sent:** Wednesday, July 11, 2012 4:54 PM

To: White, Patricia/BOS

Cc: Keiser, Jeff/MKE; King, Todd; Dillon, Frank/DET

Subject: Re: Question about another alternative approach for wren BAFs

Hello Patty,

Attached is my re-analysis of the data that GP provided in response to the wren comments. My re-analysis corrects three flaws in their approach as described below. Also, now that GP has provided the previously unavailable pairing of soil and nest box locations, it would also be appropriate for GP to provide an analysis of population vital rates (nest success, number fledged, nest attempts etc.) as related to the paired soils data. We have been told in the past that such an analysis was not feasible. We could at lest request the biological monitoring data so we could do the calculations ourselves.

Uncertainty vs Precision:

I note that GP is arguing that EPA's recommended changes should be relegated to the uncertainty discussion of the SRI. I would offer that we are presenting estimates of parameters that were poorly or not treated in the TBERA and subsequent documents. The fact that we provide precision bounds for our estimates does not reflect reduced quality or greater uncertainty, but rather a higher degree of rigor in our scientific methods and statistical analysis. Note that the response to EPAs comments do not disagree with the technical analysis. This is an important aspect of their response.

Given that vital rates were suppressed relative to ft Custer (i.e. the 10 of 11 metrics all lower than FC) this suggests that 11 mg/kg would be a site specific RBC to consider. This is an argument we have made previously, but is now more firmly supported given these spatially paired observations. Sorry for the lengthy discussion.

Following are the corrections I've included for BAFs in the spreadsheet.

1) BAF should be based on arithmetic average, not the median as recommended by Burkhard paper that we referenced in our comment.

I would also note that the average soil concentration in these home ranges is about 11 mg/kg, 30% lower than the 15 mg/kg reported in the TBERA. Why does the BAF decrease when the underlying sediment concentrations (the denominator) decreased by 30%. this is purely slight of hand related to the use of the median rather than the correct arithmetic mean. Why have they changed the statistical methods?

- 2) The eggs should be paired directly with the soil exposures within the 2 acre circles. I have re-calculated the BAFs for the 21 eggs paired directly with the soil averages. This is analogous to a designed experiment where multiple measurements are made at the same level of the design variables. The variables are not averaged prior to analysis because this suppresses the true variability of the data causing apparent precision to be over stated (e.g. confidence limits that are artificially too narrow).
- 3) The GP analysis failed to provied any uncertainty bounds for the arithmetic average value, a foundation of any scientific investigation that should be understood as essential whenever reasonable

For comparison I also calculated the unpaired ratio of means, given GP's interest in averaging some but not all of the egg tissue values prior to calculating the ratios.

I also excluded site 114 to check for sensitivity given the large number of eggs at this location and the high degree of uncertainty in soil concentrations there. Note the nearest sample values are quite distant from this area. This is probably not worth additional focus.

Let me know if you have additional questions.

Thanks for the opportunity, John

On 7/11/2012 2:31 PM, <u>Patricia.White@CH2M.com</u> wrote:

Frank is out of the office so I am trying to keep the Kalamazoo ball rolling while he is gone. I know that you and Frank discussed the alternative approach for estimating wren BAFs, which we incorporated into a comment on the Area 1 final SRI report. GP has agreed to incorporate the analysis into their uncertainty section as requested, but they have also added another

alternative approach, which involves estimating the mean soil concentration using an interpolated PCB concentration map, drawing a 2-acre circle (home range) around each wren box, and estimating the mean soil concentration within the circle. Outside of the usual uncertainties associated with using an interpolated surface, do you see any fatal flaws with this alternative approach?

I know that you are working on important analyses for another project, so I will give you a call to discuss – it shouldn't take long.

Patty

Jim,

As we discussed, attached is are response to comments included in the Area 1 SRI Report Conditional Approval. Please review and let us know if our proposed means of addressing USEPA's comments are acceptable to incorporate into the finalized report.

Mike

T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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TBD Paired IDW Wren Analysis.xlsx

JAMES SARIC/R5/USEPA/US

To KingTW, John Kern, "Devantier, Daria W. (DEQ)"

СС

07/12/2012 09:33 AM bcc JAMES SARIC

Subject Fw: proposed responses to Area 1 SRI conditional approval

comments (CONFERENCE CALL TODAY)

Daria, Todd, and John:

We are having a conference call with Georgia Pacific today (2:30 - 3 pm eastern) regarding their responses to our final comments on the Area 1 SRI report. I have also attached their responses. John has provided some feed back to us on this (thanks John). I just wanted to make sure everyone had the opportunity to participate.

thanks Jim



Draft Area 1 SRI RTC 7-9-12-final.pdf

----- Forwarded by JAMES SARIC/R5/USEPA/US on 07/12/2012 09:27 AM -----

proposed responses to Area 1 SRI conditional approval comments

Thu 07/12/2012 1:30 PM - 2:00

ΡМ

Attendance is for JAMES SARIC

Chair: Michael.Erickson@arcadis-us.com
Location: (855) 201-9213 ,;9932154689#

Required: JAMES SARIC/R5/USEPA/US, Jeff.Keiser@CH2M.com, BUCHOLTZP@michigan.gov,

Bonner.Anthony@arcadis-us.com, Frank.Dillon@CH2M.com

Time zones: This entry was created in a different time zone. The time in that time zone is: Thu 07/12/2012

2:30 PM EDT3:00 PM EDT

Description

When: Thursday, July 12, 2012 2:30 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: (855) 201-9213 ,;9932154689#

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*

Call-in number and code:

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Personal Notes				

JAMES SARIC/R5/USEPA/US To KingTW, John Kern, "Devantier, Daria W. (DEQ)"

> СС hcc

07/12/2012 09:35 AM

Subject Fw: Draft Area 2 SRI Report Data Summary Tables

With Paul begin out of the office I wanted to make sure you all had this information to review and pass along before the meeting on 7/23 in Detroit.

thanks

Jim

---- Forwarded by JAMES SARIC/R5/USEPA/US on 07/12/2012 09:34 AM -----

From: "Erickson, Michael" < Michael. Erickson@arcadis-us.com>

JAMES SARIC/R5/USEPA/US@EPA, "BUCHOLTZP@michigan.gov" To:

<BUCHOLTZP@michigan.gov>,

"Griffith, Garry T." <gtgriffi@GAPAC.com>, "Tomlinson, Lisa" <Lisa.Tomlinson@arcadis-us.com>, "Jeff.Keiser@CH2M.com" <Jeff.Keiser@CH2M.com> Cc:

Date: 07/10/2012 04:22 PM

Draft Area 2 SRI Report Data Summary Tables Subject:

Jim and Paul.

Attached are draft tables that summarize data sets to be considered for the Area 2 SRI Report. I would appreciate your review and feedback on these at our July 23rd meeting in Detroit. Please let me know if you have any questions.

Thank you, Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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restricted by law. Tables 5-1_Area 2 KRSG Data Inclusion_DRAFT_07 09 12.pdf



Tables 5-2 Area 2 Agency Data Inclusion_DRAFT_07 09 12.pdf

JAMES SARIC/R5/USEPA/US To Jeff.Keiser

CC

07/12/2012 09:37 AM

bcc

Subject Re: FW: Question about another alternative approach for wren BAFs

Jeff:

Noticed you replied to ken Kern on your CC list. I think you meant to respond to John. John Kern <jkern@kernstat.com>

thanks again for setting up the call. Also, the increase in contract funds seems to be rolling along quickly.

Jim

Jim, Patty forwarded Arcadis response... 07/12/2012 07:09:26 AM

From: <Jeff.Keiser@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: <Ken.Kern@CH2M.com>, <Patricia.White@CH2M.com>, <Frank.Dillon@CH2M.com>,

<KingTW@cdm.com>

Date: 07/12/2012 07:09 AM

Subject: FW: Question about another alternative approach for wren BAFs

Jim, Patty forwarded Arcadis response to John Kern. Below are his comments.

Thanks JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: John Kern [mailto:jkern@kernstat.com] **Sent:** Wednesday, July 11, 2012 4:54 PM

To: White, Patricia/BOS

Cc: Keiser, Jeff/MKE; King, Todd; Dillon, Frank/DET

Subject: Re: Question about another alternative approach for wren BAFs

Hello Patty,

Attached is my re-analysis of the data that GP provided in response to the wren comments. My re-analysis corrects three flaws in their approach as described below. Also, now that GP has provided the previously unavailable pairing of soil and nest box locations, it would also be appropriate for GP to provide an analysis of population vital rates (nest success, number fledged, nest attempts etc.) as related to the paired soils data. We have been told in the past that such an analysis was not feasible. We could at lest request the biological monitoring data so we could do

the calculations ourselves.

Uncertainty vs Precision:

I note that GP is arguing that EPA's recommended changes should be relegated to the uncertainty discussion of the SRI. I would offer that we are presenting estimates of parameters that were poorly or not treated in the TBERA and subsequent documents. The fact that we provide precision bounds for our estimates does not reflect reduced quality or greater uncertainty, but rather a higher degree of rigor in our scientific methods and statistical analysis. Note that the response to EPAs comments do not disagree with the technical analysis. This is an important aspect of their response.

Given that vital rates were suppressed relative to ft Custer (i.e. the 10 of 11 metrics all lower than FC) this suggests that 11 mg/kg would be a site specific RBC to consider. This is an argument we have made previously, but is now more firmly supported given these spatially paired observations. Sorry for the lengthy discussion.

Following are the corrections I've included for BAFs in the spreadsheet.

1) BAF should be based on arithmetic average, not the median as recommended by Burkhard paper that we referenced in our comment.

I would also note that the average soil concentration in these home ranges is about 11 mg/kg, 30% lower than the 15 mg/kg reported in the TBERA. Why does the BAF decrease when the underlying sediment concentrations (the denominator) decreased by 30%. this is purely slight of hand related to the use of the median rather than the correct arithmetic mean. Why have they changed the statistical methods?

- 2) The eggs should be paired directly with the soil exposures within the 2 acre circles. I have re-calculated the BAFs for the 21 eggs paired directly with the soil averages. This is analogous to a designed experiment where multiple measurements are made at the same level of the design variables. The variables are not averaged prior to analysis because this suppresses the true variability of the data causing apparent precision to be over stated (e.g. confidence limits that are artificially too narrow).
- 3) The GP analysis failed to provied any uncertainty bounds for the arithmetic average value, a foundation of any scientific investigation that should be understood as essential whenever reasonable.

For comparison I also calculated the unpaired ratio of means, given GP's interest in averaging some but not all of the egg tissue values prior to calculating the ratios.

I also excluded site 114 to check for sensitivity given the large number of eggs at this location and the high degree of uncertainty in soil concentrations there. Note the nearest sample values

are quite distant from this area. This is probably not worth additional focus.

Let me know if you have additional questions.

Thanks for the opportunity, John

On 7/11/2012 2:31 PM, <u>Patricia.White@CH2M.com</u> wrote:

Frank is out of the office so I am trying to keep the Kalamazoo ball rolling while he is gone. I know that you and Frank discussed the alternative approach for estimating wren BAFs, which we incorporated into a comment on the Area 1 final SRI report. GP has agreed to incorporate the analysis into their uncertainty section as requested, but they have also added another alternative approach, which involves estimating the mean soil concentration using an interpolated PCB concentration map, drawing a 2-acre circle (home range) around each wren box, and estimating the mean soil concentration within the circle. Outside of the usual uncertainties associated with using an interpolated surface, do you see any fatal flaws with this alternative approach?

I know that you are working on important analyses for another project, so I will give you a call to discuss – it shouldn't take long.

Patty

Jim,

As we discussed, attached is are response to comments included in the Area 1 SRI Report Conditional Approval. Please review and let us know if our proposed means of addressing USEPA's comments are acceptable to incorporate into the finalized report.

Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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TBD Paired IDW Wren Analysis.xlsx

JAMES SARIC/R5/USEPA/US

07/12/2012 10:03 AM

To "Erickson, Michael"

cc "BUCHOLTZP@michigan.gov", "Griffith, Garry T.", "Jeff.Keiser@CH2M.com", KingTW, John Kern, "Devantier, Daria W. (DEQ)", Leslie Kirby-Miles, Patricia.White,

Frank.Dillon bcc JAMES SARIC

Subject EPA DRAFT Comments on the Area 1 Alternative Screening

Technical Memo

Mike:

Enclosed are EPA's DRAFT comments on the Area 1 ASTM. Reviewing these comments should assist Georgia-Pacific in preparing for our July 23 meeting discussing the Area 1 Feasibility Study.

Jim



Area 1 ASTM DRAFT Comments.pdf

JAMES SARIC/R5/USEPA/US

07/12/2012 04:21 PM

To "BUCHOLTZP@michigan.gov", "Jeff.Keiser@CH2M.com", KingTW, John Kern, "Devantier, Daria W. (DEQ)", Leslie Kirby-Miles, Patricia.White, Frank.Dillon

cc bcc

Subject Area 1 SRI Response to Comments

I just received a call from Mike Erickson at Arcadis and he indicated they are going to incorporate the changes we requested on the conference call this afternoon. They will be incorporating the language as proposed for General Comment 1, and Specific Comments 1-4. For Specific Comment 5 they will not include the median and include mean values as we discussed today. Further they will correct the numbers at the end of the last sentence above the table as we discussed.

Mike will not be able to send out a redline version of the changes, which I told him was fine, since Georgia-Pacific agreed to make the requested changes. The redline version will be sent next week. Bonner will most likely get in touch with Frank to discuss those numbers and the calculation to make sure we all agree, but it shouldn't be an issue.

thanks for everyone's help on this and quick turn-around.

"Lebo, Martin" <martin.lebo@weyerhaeuser.c om>

07/23/2012 03:20 PM

To JAMES SARIC

cc "Gay, Richard", "Jackowski, Joseph", "Paul Bucholtz (DEQ"

bcc

Subject Weyerhaeuser Response on Area 2 Project

Jim.

Attached is a response to your request on May 14, 2012 to state whether Weyerhaeuser is willing to implement a Time Critical Removal Action (TCRA) in the Area 2 portion of OU-5 of the Allied Paper/Portage Creek/Kalamazoo River Site (Site). The discussion in May continued discussions that started in June 2011 regarding the U.S. Environmental Protection Agency's interest in applying the TCRA process in Area 2. Weverhaeuser agreed to evaluate existing and new data collected in Fall 2011 by Arcadis and to supplement those results with deeper sediment samples collected using a Vibracore sampling device. At your encouragement, Weverhaeuser collected the deeper sediment core samples after it prepared and submitted work plan documents to the USEPA and Michigan Department of Environmental Quality (MDEQ) and you provided written access to Area 2. Following receipt of the deeper sediment sample data in January 2012 and then access to the 2011 Area 2 SRI data in February 2012, Weyerhaeuser evaluated the feasibility of applying the TCRA approach to the Area 2 / Otsego City Impoundment (OCI) portion of OU-5. The discussions Weyerhaeuser participated in over the past year with agency representatives from the USEPA and MDEQ have helped refine remediation needs for the Area 2 portion of the Site. As additional background, Weverhaeuser reviewed the basis for the Plainwell Impoundment TCRA to determine if the same approach would appropriately apply to the site-specific conditions in Area 2.

Based upon our review, Weyerhaeuser has determined that a comprehensive approach to site remediation for Area 2 would best comply with CERCLA, protect human health and the environment, and provide a cost-efficient approach for remediation efforts and that a TCRA for Area 2 would not achieve these objectives. A conceptual framework for a comprehensive approach was presented at the May 14, 2012 meeting in Benton Harbor, Michigan. Details on the proposed comprehensive approach and our evaluation of applicability of the TCRA process to Area 2 are provided in the attached letter. Regards,

Martin E. Lebo, Ph.D

Senior Scientist/Remediation Manager Weyerhaeuser NR Company Ph 252-633-7511; Cell 252-626-6516 Fax 252-633-7404



2012-0723 Lebo to USEPA RE TCRA for Area 2.pdf

SAMUEL **BORRIES/R5/USEPA/US**

07/23/2012 04:20 PM

To "Hritsuk, Eric"

cc Craig Thomas, Mike Ribordy

hcc

Subject RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Eric.

Craig Thomas will have to attend for me. I will let Criag identify a date that works for him. Thx.

"Hritsuk, Eric" How do the 29th or 30th work for other... 07/23/2012 04:16:02 PM

From: "Hritsuk, Eric" < Eric. Hritsuk@arcadis-us.com>

"Hanshue, Sharon (DNR)" < HanshueS@michigan.gov>, JAMES SARIC/R5/USEPA/US@EPA, To:

SAMUEL BORRIES/R5/USEPA/US@EPA, "Bucholtz, Paul (DEQ)"

<BUCHOLTZP@michigan.gov>, "Mills, Mark (DNR)" <MILLSM@michigan.gov>, "Lisa_Williams@fws.gov" <Lisa_Williams@fws.gov>, "Todd.Goeks@noaa.gov" <Todd.Goeks@noaa.gov>, "Griffith, Garry T." <gtgriffi@GAPAC.com>, "Alfano, Judith (DEQ)" <ALFANOJ@michigan.gov>, "Jessica.Winter@noaa.gov" <Jessica.Winter@noaa.gov> "Erickson, Michael" <Michael.Erickson@arcadis-us.com>, "Suardini, Ej"

Cc:

<Ej.Suardini@arcadis-us.com>, "Esposito, Anthony" <Anthony.Esposito@arcadis-us.com>

Date: 07/23/2012 04:16 PM

RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection Subject:

How do the 29th or 30th work for other people?

I've only heard from Sharon.

Thanks. Fric

From: Hanshue, Sharon (DNR) [mailto:HanshueS@michigan.gov]

Sent: Tuesday, July 17, 2012 6:48 AM

To: Hritsuk, Eric; James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'; Alfano, Judith (DEQ);

Jessica.Winter@noaa.gov

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Any of those dates will work for me. Thank you.

Sharon Hanshue Chief, Office of Legal Services 517-335-4058 hanshues@michigan.gov

From: Hritsuk, Eric [mailto:Eric,Hritsuk@arcadis-us.com]

Sent: Monday, July 16, 2012 6:33 PM

To: Hanshue, Sharon (DNR); James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEO);

Mills, Mark (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'; Alfano, Judith

(DEQ); <u>Jessica.Winter@noaa.gov</u>

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Thanks Sharon.

We could also do August 23rd, 29th, or 30th.

Please let me know what dates work for you, and I'll find a date that works for as many folks as possible.

Eric

From: Hanshue, Sharon (DNR) [mailto:HanshueS@michigan.gov]

Sent: Monday, July 16, 2012 7:07 AM

To: Hritsuk, Eric; James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark

(DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

All – Lisa Williams and the Remediation Division staff of DEQ have indicated conflict with this date, can we select an alternative? Thanks.

Sharon Hanshue Chief, Office of Legal Services 517-335-4058

hanshues@michigan.gov

From: Hritsuk, Eric [mailto:Eric.Hritsuk@arcadis-us.com]

Sent: Thursday, July 12, 2012 8:56 AM

To: James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark (DNR); Hanshue,

Sharon (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

As a part of 2012 bank conditions monitoring activities, ARCADIS will would like to schedule the visual inspection of the banks in the former Plainwell Impoundment and Plainwell No. 2 Dam Area on Wednesday August 22, 2012. The draft Bank Conditions Monitoring Report will be submitted for your review prior to the meeting.

Please let me know if you are available on the proposed date.

If you have any questions or comments, feel free to contact me via email or at 312.575.3732.

Thanks,

Eric

Eric Hritsuk | Project Civil Engineer | <u>eric.hritsuk@arcadis-us.com</u> ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606 T. 312.575.3732 | F. 312.775.9322

www.arcadis-us.com
Professional Engineer - IL

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"Hritsuk, Eric" <Eric.Hritsuk@arcadis-us.com To SAMUEL BORRIES

cc Craig Thomas, Mike Ribordy

07/23/2012 04:30 PM

bcc

Subject RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Ok. Thanks Sam.

Eric

From: SAMUEL BORRIES [mailto:Borries.Samuel@epamail.epa.gov]

Sent: Monday, July 23, 2012 4:21 PM

To: Hritsuk, Eric

Cc: Craig Thomas; Mike Ribordy

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<u>Jessica.Winter@noaa.gov</u>" < <u>Jessica.Winter@noaa.gov</u>>

Cc: "Erickson, Michael" < <u>Michael.Erickson@arcadis-us.com</u>>, "Suardini, Ej" < <u>Ej.Suardini@arcadis-us.com</u>>, "Esposito,

Anthony" < Anthony. Esposito@arcadis-us.com >

Date: 07/23/2012 04:16 PM

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Jessica.Winter@noaa.gov

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(DEQ); <u>Jessica.Winter@noaa.gov</u>

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(DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

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Chief, Office of Legal Services
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hanshues@michigan.gov

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To: James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark (DNR); Hanshue,

Sharon (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

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If you have any questions or comments, feel free to contact me via email or at 312.575.3732.

Thanks,

Eric

Eric Hritsuk | Project Civil Engineer | eric.hritsuk@arcadis-us.com ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606

T. 312.575.3732 | F. 312.775.9322

www.arcadis-us.com

Professional Engineer - IL

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<Jeff.Keiser@CH2M.com>

To JAMES SARIC

07/24/2012 07:17 AM

cc Frank.Dillon

bcc

Subject FW: Final revisions to Area 1 SRI Report

Jim,

Arcadis forwarded their responses to the SRI comments last week when you were gone. I had Frank take a look and he was ok with the response.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: Dillon, Frank/DET

Sent: Friday, July 20, 2012 10:13 AM **To:** Keiser, Jeff/MKE; White, Patricia/BOS

Subject: RE: Final revisions to Area 1 SRI Report

Guys,

They look good to me. Bonner and I had discussed the calculation we didn't understand and I was cool with that.

Frank

From: Keiser, Jeff/MKE

Sent: Friday, July 20, 2012 10:51 AM **To:** Dillon, Frank/DET; White, Patricia/BOS

Subject: FW: Final revisions to Area 1 SRI Report

Frank, did you see this? Let me know your thoughts. Jim will want to turn around approval as quickly as possible.

Thanks

JK

Jeff Keiser Project Manager 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct – 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com Solutions without Boundaries

From: Erickson, Michael [mailto:Michael.Erickson@arcadis-us.com]

Sent: Tuesday, July 17, 2012 12:52 PM

To: JAMES SARIC; Keiser, Jeff/MKE; BUCHOLTZP@michigan.gov

Cc: Griffith, Garry T.

Subject: Final revisions to Area 1 SRI Report

Jim,

Consistent with USEPA's verbal feedback on our draft responses to the USEPA's conditional approval comments, the Area 1 SRI report will be revised as shown in the attached Responses to Comments document and then submitted in final form. Please confirm by email back to me that the attached responses are acceptable to prepare the final, EPA-approved Area 1 SRI Report. After receiving your confirmation, I will provide a draft distribution list for your review indicating where the final report will be sent, once produced.

Thank you, Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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"Hritsuk, Eric" <Eric.Hritsuk@arcadis-us.com To SAMUEL BORRIES

cc Craig Thomas, Mike Ribordy

07/24/2012 02:11 PM

bcc

Subject RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Craig

NOAA would like to hold the meeting Sept. 5 or 6. How do those dates work for you?

Thanks,

Eric

From: SAMUEL BORRIES [mailto:Borries.Samuel@epamail.epa.gov]

Sent: Monday, July 23, 2012 4:21 PM

To: Hritsuk, Eric

Cc: Craig Thomas; Mike Ribordy

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

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To: "Hanshue, Sharon (DNR)" < https://linear.com/hanshues@michigan.gov, JAMES SARIC/R5/USEPA/US@EPA, SAMUEL BORRIES/R5/USEPA/US@EPA, "Bucholtz, Paul (DEQ)" < BUCHOLTZP@michigan.gov, "Mills, Mark (DNR)" < MILLSM@michigan.gov, "Lisa Williams@fws.gov" < https://example.com/williams@fws.gov, "Indd.Goeks@noaa.gov" < https://example.com/williams@fws.gov, "Griffith, Garry T." < https://example.com/williams@fws.gov, "Alfano, Judith (DEQ)" < ALFANOJ@michigan.gov, "

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Cc: "Erickson, Michael" < Michael. Erickson@arcadis-us.com>, "Suardini, Ej" < Ej. Suardini@arcadis-us.com>, "Esposito,

Anthony" < Anthony. Esposito@arcadis-us.com >

Date: 07/23/2012 04:16 PM

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Eric

Eric Hritsuk | Project Civil Engineer | eric.hritsuk@arcadis-us.com ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606

T. 312.575.3732 | F. 312.775.9322

www.arcadis-us.com

Professional Engineer - IL

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Craig Thomas /R5/USEPA/US To "Hritsuk, Eric"

07/24/2012 05:40 PM cc Mike Ribordy, SAMUEL BORRIES

bcc

Subject RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Eric,

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"Hritsuk, Eric" Craig NOAA would like to hold the mee... 07/24/2012 02:14:17 PM

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Thanks,

Eric

Eric Hritsuk | Project Civil Engineer | eric.hritsuk@arcadis-us.com ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606

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Professional Engineer - IL

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Mike Ribordy /R5/USEPA/US To Eric. Hritsuk

07/25/2012 04:17 PM cc SAMUEL BORRIES, Ramon Mendoza, Craig Thomas

bcc

Subject Fw: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Eric.

Sorry to switch things up on you again. Ramon Mendoza will be filling in for Sam. Ramon (he's cc'd) will get back to you shortly on those meeting dates. Thanks for your patience.

Mike Ribordy, Chief Emergency Response Section #3 U.S. EPA Region 5 77 W. Jackson Blvd. (SE-5J) Chicago, Illinois 60604 Phone: 312-886-4592

----- Forwarded by Mike Ribordy/R5/USEPA/US on 07/25/2012 04:14 PM -----

From: Craig Thomas/R5/USEPA/US
To: Mike Ribordy/R5/USEPA/US@EPA,

Date: 07/24/2012 05:38 PM

Subject: Fw: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

I need to talk to you about this ASAP.

----- Forwarded by Craig Thomas/R5/USEPA/US on 07/24/2012 05:41 PM -----

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www.arcadis-us.com

Professional Engineer - IL

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Mike Ribordy /R5/USEPA/US To Ramon Mendoza

07/25/2012 04:18 PM СС

bcc

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Ramon,

Can you get back to Eric regarding your availability.

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Please let me know if you are available on the proposed date.

If you have any questions or comments, feel free to contact me via email or at 312.575.3732.

Thanks,

Eric

Eric Hritsuk | Project Civil Engineer | eric.hritsuk@arcadis-us.com ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606

T. 312.575.3732 | F. 312.775.9322

www.arcadis-us.com

Professional Engineer - IL

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JAMES SARIC/R5/USEPA/US To Mike Ribordy

СС

07/25/2012 04:28 PM bcc

Subject Fw: Plainwell stability presentation

Mike:

Here's the Plainwell bank stabilization presentation provided by MDEQ.

Jim

----- Forwarded by JAMES SARIC/R5/USEPA/US on 07/25/2012 04:27 PM -----

From: "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>

To: JAMES SARIC/R5/USEPA/US@EPA,

Date: 07/03/2012 12:02 PM

Subject: Plainwell stability presentation

Jim,

Attached is the presentation I shared with DEQ and DNR management today regarding Plainwell. I'm sure we will want to discuss my managements desire to meet with EPA. Just so you know, some of the names being thrown around include you, Rick, Wendy C., and Leslie.

Paul Bucholtz MDEQ-RD Superfund Section

PDF

517-373-8174 Stream width-7-3-12.pdf

"Hritsuk, Eric" <Eric.Hritsuk@arcadis-us.com

07/26/2012 01:51 PM

To Mike Ribordy

cc SAMUEL BORRIES, Ramon Mendoza, Craig Thomas

bcc

Subject RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Ramon,

I think we are aiming for August 30.

Let me know if that works for you.

Thanks, Eric

From: Mike Ribordy [mailto:Ribordy.Mike@epamail.epa.gov]

Sent: Wednesday, July 25, 2012 4:18 PM

To: Hritsuk, Eric

Cc: SAMUEL BORRIES; Ramon Mendoza; Craig Thomas

Subject: Fw: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Eric.

Sorry to switch things up on you again. Ramon Mendoza will be filling in for Sam. Ramon (he's cc'd) will get back to you shortly on those meeting dates. Thanks for your patience.

Mike Ribordy, Chief **Emergency Response Section #3** U.S. EPA Region 5 77 W. Jackson Blvd. (SE-5J) Chicago, Illinois 60604 Phone: 312-886-4592

---- Forwarded by Mike Ribordy/R5/USEPA/US on 07/25/2012 04:14 PM -----

From: Craig Thomas/R5/USEPA/US To: Mike Ribordy/R5/USEPA/US@EPA, Date: 07/24/2012 05:38 PM

Subject: Fw: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

I need to talk to you about this ASAP.

---- Forwarded by Craig Thomas/R5/USEPA/US on 07/24/2012 05:41 PM -----

From: "Hritsuk, Eric" < Eric. Hritsuk@arcadis-us.com > To: SAMUEL BORRIES/R5/USEPA/US@EPA

Cc: Craig Thomas/R5/USEPA/US@EPA, Mike Ribordy/R5/USEPA/US@EPA

Date: 07/24/2012 02:14 PM

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Craig

NOAA would like to hold the meeting Sept. 5 or 6. How do those dates work for you?

Thanks,

Eric

From: SAMUEL BORRIES [mailto:Borries.Samuel@epamail.epa.gov]

Sent: Monday, July 23, 2012 4:21 PM

To: Hritsuk, Eric

Cc: Craig Thomas; Mike Ribordy

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Eric,

Craig Thomas will have to attend for me. I will let Criag identify a date that works for him. Thx.

From: "Hritsuk, Eric" < Eric. Hritsuk@arcadis-us.com >

To: "Hanshue, Sharon (DNR)" < <u>HanshueS@michigan.gov</u>>, JAMES SARIC/R5/USEPA/US@EPA, SAMUEL BORRIES/R5/USEPA/US@EPA, "Bucholtz, Paul (DEQ)" < <u>BUCHOLTZP@michigan.gov</u>>, "Mills, Mark (DNR)" < MILLSM@michigan.gov>, "Lisa Williams@fws.gov" < Lisa Williams@fws.gov>, "Todd.Goeks@noaa.gov" < Todd.Goeks@noaa.gov>, "Griffith, Garry T." < atgriffi@GAPAC.com>, "Alfano, Judith (DEQ)" < ALFANOJ@michigan.gov>, "

<u>Jessica.Winter@noaa.gov</u>" < <u>Jessica.Winter@noaa.gov</u>>

Cc: "Erickson, Michael" < Michael. Erickson@arcadis-us.com >, "Suardini, Ej" < Ej. Suardini@arcadis-us.com >, "Esposito, Anthony" <

Anthony. Esposito@arcadis-us.com>

Date: 07/23/2012 04:16 PM

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

How do the 29th or 30th work for other people?

I've only heard from Sharon.

Thanks,

Eric

From: Hanshue, Sharon (DNR) [mailto:HanshueS@michigan.gov]

Sent: Tuesday, July 17, 2012 6:48 AM

To: Hritsuk, Eric; James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'; Alfano, Judith (DEQ);

Jessica.Winter@noaa.gov

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Any of those dates will work for me. Thank you.

Sharon Hanshue Chief, Office of Legal Services 517-335-4058 hanshues@michigan.gov

From: Hritsuk, Eric [mailto:Eric.Hritsuk@arcadis-us.com]

Sent: Monday, July 16, 2012 6:33 PM

To: Hanshue, Sharon (DNR); James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'; Alfano, Judith

(DEQ); <u>Jessica.Winter@noaa.gov</u>

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

Thanks Sharon.

We could also do August 23rd, 29th, or 30th.

Please let me know what dates work for you, and I'll find a date that works for as many folks as possible.

Eric

From: Hanshue, Sharon (DNR) [mailto:HanshueS@michigan.gov]

Sent: Monday, July 16, 2012 7:07 AM

To: Hritsuk, Eric; James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark

(DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: RE: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

All – Lisa Williams and the Remediation Division staff of DEQ have indicated conflict with this date, can we select an alternative? Thanks.

Sharon Hanshue
Chief, Office of Legal Services
517-335-4058
hanshues@michigan.gov

From: Hritsuk, Eric [mailto:Eric.Hritsuk@arcadis-us.com]

Sent: Thursday, July 12, 2012 8:56 AM

To: James A. Saric; Borries.Samuel@epamail.epa.gov; Bucholtz, Paul (DEQ); Mills, Mark (DNR); Hanshue,

Sharon (DNR); Lisa Williams@fws.gov; Todd.Goeks@noaa.gov; 'Griffith, Garry T.'

Cc: Erickson, Michael; Suardini, Ej; Esposito, Anthony

Subject: 2012 Plainwell and Plainwell 2 TCRA Bank Inspection

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Eric

Eric Hritsuk | Project Civil Engineer | eric.hritsuk@arcadis-us.com ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606

T. 312.575.3732 | F. 312.775.9322

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Professional Engineer - IL

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JAMES SARIC/R5/USEPA/US

To Ramon Mendoza

cc Mike Ribordy, SAMUEL BORRIES

07/26/2012 02:59 PM

Subject Re: Fw: Plainwell stability presentation

Plainwell, not Plainwell #2 dam is the real area where channel stability is in question and where MDEQ takes over O and M in the spring.

bcc

Jim

Ramon Mendoza I have just started reading documents... 07/26/2012 02:39:46 PM

From: Ramon Mendoza/R5/USEPA/US
To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: Mike Ribordy/R5/USEPA/US@EPA, SAMUEL BORRIES/R5/USEPA/US@EPA

Date: 07/26/2012 02:39 PM

Subject: Re: Fw: Plainwell stability presentation

I have just started reading documents the website Plainwell No. 2 Dam (website at http://epaosc.org/site/site_profile.aspx?site_id=5239). Feel free to send over some documents that are not posted.

Ramon

JAMES SARIC	Ramon: If you have any questions rega	07/26/2012 09:47:06 AM
Mike Ribordy	Ramon, There's a briefing with Rick on	07/25/2012 04:46:31 PM

<Jeff.Keiser@CH2M.com>

07/31/2012 11:32 AM

To JAMES SARIC

cc Patricia.White, Frank.Dillon

bcc

Subject Area 1 FS and Area 2 SRI Report Outline Review

Jim, just to document our discussion Monday July 30, CH2M HILL has reviewed the Area 1 Feasibility Study Report and Area 2 Otsego City Impoundment Supplemental Remedial Investigation Report Outlines received June 14, 2012. It appears both outlines follow current EPA guidance. We have no comments on these documents.

If you have any questions please call me at the number listed below.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

<Jeff.Keiser@CH2M.com>

07/31/2012 02:20 PM

To JAMES SARIC

cc Patricia.White, Frank.Dillon

bcc

Subject Area 2 Summary of Data Collected By KRSG Review

Jim,

CH2M HILL completed review of Table 5-1—Summary of Data Collected by KRSG and Arcadis in Area 2 (June 2012). We are unaware of any data that may be missing from the summary.

If you have any questions please contact me a the number listed below.

JK

Jeff Keiser
Project Manager
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Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

JAMES SARIC/R5/USEPA/US To "Riley, John (DEQ)"

СС

08/01/2012 10:00 AM bcc

Subject Fw: Weyerhaeuser Response on Area 2 Project

John,

It was great speaking with you. Enclosed is Weyerhaeuser's latest response following several months of discussion with EPA regarding completing a Superfund Removal/GLLA joint project. As you can read from the attached letter and email below Weyerhaeuser has declined to participate in a Removal project and will participate as a PRP once EPA selects the remedy, as part of the Superfund Remedial process.

This latest development increases the significance of your potential project to remove the dam in Otsego City and install some type of temporary dam structure. For the Otsego City Dam impoundment (Area 2) of the Kalamazoo River Superfund cleanup the Remedial Investigation (which defines the rate and extent of contamination) is scheduled to be submitted by Georgia-Pacific to EPA on 11/1/12. The Feasibility Study (which evaluates potential remedy alternatives) is scheduled to be submitted to EPA late next summer 2013 and most likely a remedy decision (Record of Decision) for Area 2 will occur in February 2014. After that EPA will have to negotiate a consent agreement with Potentially Responsible Parites (PRPs) such as Georgia-Pacific and Weyerhaeuser to implement the remedy. Therefore, the earliest actual remediation would occur in Area 2 would be Spring 2015.

Despite the fact that actual cleanup work may not occur in Area 2 until 2015, the decision to remove the dam can significantly impact the path forward and remedies evaluated in the Superfund process. As discussed above, the Feasibility Study is anticipated to be submitted in the summer of 2013. This will evaluate potential remedy options. Superfund does not have jurisdiction to remove dams. Therefore, if there are no plans in place to remove the Otsego City dam the remedies proposed in the Feasibility Study by the PRPs will be "dam in-place" remedies. These remedies will require much less sediment and floodplain material removal, leaving behind a potential deeper mass of PCB contaminated material both in-stream and in the flood plain, that could be converted to concentrations of materials entering the Kalamazoo River should the dam collapse or be removed in the future. EPA Superfund would be required to approve these remedies consistent with Superfund, assuming the dam remains in place.

Should MDNR/MDEQ determine a way to remove the Otsego City Dam and build a temporary dam structure it would be a natural progression of the clean-up process, as the EPA Superfund process would follow-up with remedy decisions addressing contamination in both the River and floodplains assuming the dam was removed.

I believe it's important to continue to coordinate efforts toward dam removal and sediment cleanup working together with the various programs involved.

Thanks Jim Saric EPA Region V 312.886.0992

---- Forwarded by JAMES SARIC/R5/USEPA/US on 08/01/2012 09:18 AM -----

From: "Lebo, Martin" <martin.lebo@weyerhaeuser.com>

To: JAMES SARIC/R5/USEPA/US@EPA.

Cc: "Gay, Richard" <richard.gay@weyerhaeuser.com>, "Jackowski, Joseph"

<Joseph.Jackowski@weyerhaeuser.com>, "Paul Bucholtz (DEQ" <BUCHOLTZP@michigan.gov>

Date: 07/23/2012 03:20 PM

Subject: Weyerhaeuser Response on Area 2 Project

Jim.

Attached is a response to your request on May 14, 2012 to state whether Weyerhaeuser is willing to implement a Time Critical Removal Action (TCRA) in the Area 2 portion of OU-5 of the Allied Paper/Portage Creek/Kalamazoo River Site (Site). The discussion in May continued discussions that started in June 2011 regarding the U.S. Environmental Protection Agency's interest in applying the TCRA process in Area 2. Weyerhaeuser agreed to evaluate existing and new data collected in Fall 2011 by Arcadis and to supplement those results with deeper sediment samples collected using a Vibracore sampling device. At your encouragement, Weyerhaeuser collected the deeper sediment core samples after it prepared and submitted work plan documents to the USEPA and Michigan Department of Environmental Quality (MDEQ) and you provided written access to Area 2. Following receipt of the deeper sediment sample data in January 2012 and then access to the 2011 Area 2 SRI data in February 2012, Weverhaeuser evaluated the feasibility of applying the TCRA approach to the Area 2 / Otsego City Impoundment (OCI) portion of OU-5. The discussions Weyerhaeuser participated in over the past year with agency representatives from the USEPA and MDEO have helped refine remediation needs for the Area 2 portion of the Site. As additional background, Weyerhaeuser reviewed the basis for the Plainwell Impoundment TCRA to determine if the same approach would appropriately apply to the site-specific conditions in Area 2.

Based upon our review, Weyerhaeuser has determined that a comprehensive approach to site remediation for Area 2 would best comply with CERCLA, protect human health and the environment, and provide a cost-efficient approach for remediation efforts and that a TCRA for Area 2 would not achieve these objectives. A conceptual framework for a comprehensive approach was presented at the May 14, 2012 meeting in Benton Harbor, Michigan. Details on the proposed comprehensive approach and our evaluation of applicability of the TCRA process to Area 2 are provided in the attached letter. Regards,

Martin E. Lebo, Ph.D

Senior Scientist/Remediation Manager Weyerhaeuser NR Company Ph 252-633-7511; Cell 252-626-6516 Fax 252-633-7404



2012-0723 Lebo to USEPA RE TCRA for Area 2.pdf

JAMES SARIC/R5/USEPA/US To Jeff.Keiser

СС

08/01/2012 10:01 AM

Subject Fw: Weyerhaeuser Response on Area 2 Project

FYI

----- Forwarded by JAMES SARIC/R5/USEPA/US on 08/01/2012 10:00 AM -----

From: "Lebo, Martin" < martin.lebo@weyerhaeuser.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: "Gay, Richard" < richard.gay@weyerhaeuser.com >, "Jackowski, Joseph"

<Joseph.Jackowski@weyerhaeuser.com>, "Paul Bucholtz (DEQ" <BUCHOLTZP@michigan.gov>

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2012-0723 Lebo to USEPA RE TCRA for Area 2.pdf

JAMES SARIC/R5/USEPA/US

To "Erickson, Michael", "Griffith, Garry T."

СС

08/01/2012 10:03 AM bcc

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Cc: "Gay, Richard" < richard.gay@weyerhaeuser.com>, "Jackowski, Joseph"

<Joseph.Jackowski@weyerhaeuser.com>, "Paul Bucholtz (DEQ" <BUCHOLTZP@michigan.gov>

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2012-0723 Lebo to USEPA RE TCRA for Area 2.pdf

JAMES SARIC/R5/USEPA/US To JAMES SARIC

CC

08/01/2012 10:03 AM

bcc

Subject Fw: Weyerhaeuser Response on Area 2 Project

----- Forwarded by JAMES SARIC/R5/USEPA/US on 08/01/2012 10:03 AM -----

From: JAMES SARIC/R5/USEPA/US

To: "Riley, John (DEQ)" <RILEYJ2@michigan.gov>,

Date: 08/01/2012 10:00 AM

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Thanks Jim Saric EPA Region V 312.886.0992 From: "Lebo, Martin" <martin.lebo@weyerhaeuser.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: "Gay, Richard" <richard.gay@weyerhaeuser.com>, "Jackowski, Joseph"

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[attachment "2012-0723 Lebo to USEPA RE TCRA for Area 2.pdf" deleted by JAMES SARIC/R5/USEPA/US]

Craig Thomas/R5/USEPA/US@EPA

08/03/2012 07:55 PM

To Craig Thomas, Paul Ruesch, SAMUEL BORRIES, Jacob Hassan, Elizabeth Nightingale, FREDRICK MICKE, Jason Sewell, KEITH LESNIAK, Don Deblasio, Megan McSeveney, Jason El-Zein, JOHN MARITOTE, Mike Ribordy, JAMES SARIC, REBECCA FREY, Michael Berkoff, Leslie Kirby-Miles, Nicole Wood, THOMAS MARKS, Sherry Fielding, John Glover, Carol Ropski, millsm, devantierd, vanotterenb, walczakj, bucholtzp, ebowman, jrhinefield, mbrowning, christopher.lantinga, mwahrer, merchantb, jungd, polegam, lisa_williams, Goeks.Todd, valincia_darby, Mark Johnson

СС

bcc

Subject Pollution Report #15 Portage Creek Area - Progress

Attached is a Pollution Report (POLREP) regarding:

USEPA Region V Portage Creek Area Stockbridge Ave to Kalamazoo River, Kalamazoo, MI

To view this POLREP, please open the attachment. Lotus Notes Users, please Launch the attachment.

For additional information regarding this site, please visit the website by clicking on this link: http://www.epaosc.org/portagecreekarea





portagecreekarea_polrep_15.htm portagecreekarea_polrep_15_IMG_3486.JPG





portagecreekarea_polrep_15_IMG_3558.JPG portagecreekarea_polrep_15_IMG_3500.JPG

"Flask, Penny" <Penny.Flask@arcadis-us.co m>

08/10/2012 02:38 PM

To JAMES SARIC

cc Michael Berkoff, SAMUEL BORRIES, "Bucholtz, Paul (bucholtzp@michigan.gov)", "hanshues@michigan.gov", "jkeiser@ch2m.com", "Todd.Goeks@noaa.gov", "jessica.winter@noaa.gov", "richard.gav@weyerhaeuser.com".

"martin.lebo@weyerhaeuser.com",

"khuibregtse@environcorp.com", "gtgriffi@gapac.com",

"Erickson, Michael"

bcc

Subject SRI/FS Monthly Report (July 2012)

Mr. Saric,

On behalf of Michael Erickson, please find attached the Kalamazoo River SRI/FS Monthly Report for July 2012. A hard copy (with Attachment A) will be sent via Federal Express.

Feel free to contact Mr. Erickson at 810.225.1924 or michael.erickson@arcadis-us.com if you have any questions or comments.

Thank you.

Penny Flask | Sr. Project Assistant 1 | penny.flask@arcadis-us.com

ARCADIS of New York, Inc. | 6723 Towpath Road, P.O. Box 66 | Syracuse, NY 13214-0066 T: 315 671 9131 www.arcadis-us.com

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restricted by law. B0064539_0111211100_Jul 2012_Monthly_SRIFS.pdf

Nicole Wood /R5/USEPA/US

To Michael Berkoff

08/13/2012 01:55 PM

cc hcc

Subject Fw: LePetomane XXIII, Kalamazoo Site : Compensation and

Expense Report L12-001/002

Let me know if you have any issues with LePetomane's accounting or charges

Nicole Wood-Chi Associate Regional Counsel U.S. EPA Region 5 77 W. Jackson Blvd. C-14J Chicago, IL 60604 312-886-0664

----- Forwarded by Nicole Wood/R5/USEPA/US on 08/13/2012 01:52 PM -----

From: Andrew Steinberg <andrew.steinberg@lepetomaneinc.com>

To: Nicole Wood/R5/USEPA/US@EPA,

Date: 08/13/2012 01:42 PM

Subject: LePetomane XXIII, Kalamazoo Site: Compensation and Expense Report L12-001/002

Nicole -

Linked to this email, please find for your review the detailed time and expense records for the administrative and environmental expenses incurred by the Lyondell Environmental Custodial Trust (the "Trust") for the period January 1, 2011 through May 31, 2011.

The requested payments total the sum of \$253,215.47 with a site-specific component of \$215,673.87.

Please see the linked PDFs for payment details, a summary of the various fees and expenses incurred during the period, and budget tracking tables for site-specific administrative and environmental services.

To obtain the Compensation and Expense Report packages including all invoice back-up: January - March:

https://lepetomaneinc.sharefile.com/d/s6a2a9fd099948de8

Upon download, the file L12-001-MI.PDF should be opened first.

April - May:

https://lepetomaneinc.sharefile.com/d/s8bfe4a0598349e89

Upon download, the file L12-002-MI.PDF should be opened first.

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

08/13/2012 02:03 PM

To JAMES SARIC

cc Paul Bucholtz, "Garry T. Griffith", "Erickson, Michael"

bcc

Subject Area 2 Alternatives Screening Technical Memorandum

(ASTM) deferral letter request

Dear Mr. Saric

On behalf of Mike Erickson, please find attached a *Area 2 Alternatives Screening Technical Memorandum (ASTM)* deferral letter request. Two hard copies will be sent to you today via Fed Ex. Should you have any questions please contact Mike directly at your convenience.

Respectfully, Barb

Barb Shreve | Assistant | <u>barb.shreve@arcadis-us.com</u>

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 D: 810.225.1981 | O: 810.229.8594

www.arcadis-us.com Sediment Assessment, Management & Remediation

Professional Affiliate / ARCADIS G&M of Michigan, LLC

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restricted by law.A2 ASTM Deferral Ltr_08.13.12.pdf

"McGuire, Pat"
<Pat.McGuire@arcadis-us.co
m>

08/14/2012 09:37 AM

To Michael Berkoff

cc "Erickson, Michael", "Garry Griffith (gtgriffi@GAPAC.com)", "J. Michael Davis (jmdavis@gapac.com)", JAMES SARIC, "Jeff Keiser (jkeiser@CH2M.com)", "Judith (Gapp) Alfano (alfanoj@michigan.gov)", "Kathy Huibregtse (khuibregtse@environcorp.com)", "Kristi Zakrzewski (ZakrzewskiK@michigan.gov)", Leslie Kirby-Miles, "Lisa L., PhD Williams (Lisa_Williams@fws.gov)", "Martin Lebo (martin.lebo@weyerhaeuser.com)", Nicole Wood, "Paul A., P.E. Montney (pamontne@gapac.com)", "Paul T. Bucholtz (bucholtp@michigan.gov)", "Polly Synk (SynkP@michigan.gov)", "Richard Gay (richard.gay@weyerhaeuser.com)", Scott Hutsell, "Todd Goeks (Todd.Goeks@noaa.gov)", "Melda, Zachary A.", "Jessica Winter", Sharon Hanshue, "tiffany.johnson@ch2m.com"

bcc

Subject Willow Boulevard/A-Site Landfill OU2 Progress Report

Michael

Attached for your records is the Willow Blvd/A-Site OU2 July 2012 Progress Report, which covers the period between July 1 and July 31. If you have any questions regarding this report please do not hesitate to contact me.

Thanks Pat

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restricted by law. Aug 2012 WB_A-Site OU Progress Report_FINAL USEPA_08.14.12.pdf

"Flask, Penny" <Penny.Flask@arcadis-us.co m>

08/15/2012 12:43 PM

To JAMES SARIC

cc Michael Berkoff, SAMUEL BORRIES, "Bucholtz, Paul (bucholtzp@michigan.gov)", "hanshues@michigan.gov", "jkeiser@ch2m.com", "Todd.Goeks@noaa.gov",

"jessica.winter@noaa.gov",

"richard.gay@weyerhaeuser.com",

"martin.lebo@weyerhaeuser.com",

"khuibregtse@environcorp.com", "gtgriffi@GAPAC.com",

"Erickson, Michael"

bcc

Subject Eleventh Semi-Annual Progress Report (February 2012 to July 2012)

Mr. Saric,

On behalf of Michael Erickson, the Kalamazoo River SRI/FS Eleventh Semi-Annual Progress Report (Feb. 2012 to Jul. 2012) is attached. A hard copy will follow via Federal Express.

Feel free to contact Michael Erickson at 810.225.1924 or michael.erickson@arcadis-us.com if you have any questions or comments.

Thank you.

Penny Flask | Sr. Project Assistant 1 | penny.flask@arcadis-us.com

ARCADIS of New York, Inc. | 6723 Towpath Road, P.O. Box 66 | Syracuse, NY 13214-0066 T: 315 671 9131 www.arcadis-us.com

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restricted by law. B0064539_0131211100_SemiAnnual_SRIFS Report Feb12-Jul12.pdf

"Erickson, Michael" <Michael.Erickson@arcadis-u s.com>

08/22/2012 10:25 AM

To JAMES SARIC, "'Jeff.Keiser@CH2M.com", "Bucholtz, Paul (DEQ)", "Griffith, Garry T."

cc "VanDewalker, Heather", Mark Brown

bcc

Subject Draft responses to USEPA comments on the Area 1 ASTM

Jim,

As we discussed, attached are draft responses to USEPA's comments on the Area 1 ASTM for discussion on a call we have planned for next Tuesday. I look forward to discussing these with you.

Regards, Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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Craig Thomas /R5/USEPA/US To JAMES SARIC

08/28/2012 11:35 AM cc Borries. Samuel, Mike Ribordy, Paul Ruesch

bcc

Subject Re: Kalamazoo River Cubic Yard Sediment Request

Jim, Sam and Mike

Here's what I have right now. Waiting for Kevin Cunningham to recalculate volumes from SA5-D, which we did not have until this morning

SA-7 1,450 cubic yards

SA-6 2,982 cubic yards*

Axtell Creek 1,871 cubic yards

SA5D (grids 1-7) pending

Current subtotal (not including SA5-D) 6,303 cubic yards.

Jim, I am not sure what time period your calendar year is covering. We are planning on excavating all of 5-D and 5-C by the end of this Fiscal year.

Based on what we are seeing in the field, the original volume estimates are low, but FIELDs has estimated SA5D at 3,880 cubic yards and SA5-C at 2,040 cubic yards. If you need an estimate right now as to where we will be by the end of the Fiscal Year, we are looking at 12,223 cubic yards of contaminated soil and sediment.

Craig

* Note SA-6 estimate is low. Have to extract data from TIN file shot by Terra to determine exact volumes.

JAMES SARIC Sam and Mike: Per the request from th... 08/28/2012 11:15:48 AM

From: JAMES SARIC/R5/USEPA/US

To: SAMUEL BORRIES/R5/USEPA/US@EPA

Cc: Mike Ribordy/R5/USEPA/US@EPA, Craig Thomas/R5/USEPA/US@EPA

Date: 08/28/2012 11:15 AM

Subject: Re: Kalamazoo River Cubic Yard Sediment Request

Sam and Mike:

Per the request from the Regional Administrator's office and our conversation yesterday I am putting together total cubic yards of materials removed each calendar year for the Kalamazoo River site . I have looked at the final reports for the Bryant Mill Pond, Plainwell Dam and Plainwell 2 Dam removal actions. Craig is getting me the cubic yardage information for Portage Creek to date and I'll get this to Rick Karl. I'll make sure and copy you with the numbers, so you can have them for future requests.

I just didn't want you to have to duplicate this effort.

thanks Jim

SAMUEL BORRII	S Thanks, it will be much easier. Fro	08/28/2012 08:53:21 AM
JAMES SARIC	Sam: I was just told the Total Cubic yar	08/28/2012 08:52:07 AM

<Frank.Dillon@CH2M.com>

To JAMES SARIC, Jeff.Keiser

08/29/2012 08:21 AM

cc bcc

Subject RTCs for ASTM

Jim,

I just got off the phone with John Kerns. We were discussing Arcadis's response to our comments on the potential for sensitive vermivorus birds at the site. After we talked through the issue we feel that their conclusion is to definitive for the data. We don't disagree in general but would like to develop some alternative language.

So I propose for today, that we tell GP that we are not in 100% agreement in making a definitive statement regarding the presence of vermivorus species and will be providing some language to address our concerns.

Frank

Frank S. Dillon

Principal Technologist - Ecological Risk Assessment

Environment Services Business Group

CH2M Hill

Okemos, MI 48864

Direct - 517.349.1363 Please Note new direct Line

Cell - 517-488-4901

Voice mail - 517.347.3138 ext 41520

Fax - 517.347.3793

www.ch2mhill.com

"Riley, John (DEQ)" <RILEYJ2@michigan.gov> 08/30/2012 01:55 PM To "Trumble, Luke (DEQ)", "Fusco, Mario (DEQ)", "Mills, Mark (DNR)", "Smith, Kregg (DNR)", "Bucholtz, Paul (DEQ)", JAMES SARIC, Susan Virgilio, Marc Tuchman, "Sarkipato, Ernest (DEQ)", "Haroldson, Derek (DEQ)", "Naperala, Troy (troy.naperala@urs.com)", "tbeard@cityofotsego.org"

cc bcc

Subject Otsego City Dam removal discussion

Colleagues-

I am proposing to hold a meeting at the Plainwell office of the Michigan DNR during the last week of September or the first week of October. The purpose is to discuss the staging and costs of the removal of the Otsego City dam. The idea is that we would sit down for the majority of the discussion, then move out to the dam site for further talks. This will be a very important discussion as we begin to seek funding and permits for the project. Please bring any engineering or other relevant technical information you may have.

No funding is in place yet. We have no commitments, but we are seeking funds from a variety of sources. It's important that we nail down some technical details and cost estimates, so we can have that information for potential funders. Specifically, we need to come up with a pretty good handle on costs and order of operations for: 1) construction of a temporary water control structure, 2) removal/disposal of contaminated sediments between the existing dam and the temporary structure, and 3) removal of the existing dam structure.

Much of the engineering design work and cost estimates have been developed already, but there's a need to talk through the details to make sure it's all workable, and to identify any remaining information gaps. Another crucial element of this is coordinating the activities across all the agencies involved. Your participation is very important.

Please click the link below to indicate your availability on several dates. Not everyone would need to join the site visit. I will make arrangements to conference call with anyone that can't or would prefer not to make the trip.

http://doodle.com/7vq5vititv8c49kg

Please respond to the Doodle poll no later than Monday, September 10° . I am on vacation until that day, so I will schedule the meeting as soon as I return.

I will work up an agenda prior to the meeting and send this, along with directions to the DNR Plainwell office in advance of the meeting. Please let me know if you have any questions or need additional information.

Here's a quick who's who for the people on this list (and please let me know if you think I missed someone who needs to be in on this!):

Luke Trumble and Mario Fusco, DEQ Dam Safety program Mark Mills, DNR Wildlife division Kregg Smith, DNR Fisheries Paul Bucholtz, DEQ Superfund
Jim Saric, EPA Superfund
Susan Virgilio, EPA Legacy Act/Kzoo River AOC Liaison, Great Lakes National Program Office
Marc Tuchman, EPA Legacy Act, GLNPO
Ernie Sarkipato, DEQ Kzoo District Floodplain engineer
Derek Haroldson, DEQ Kzoo District Inland Lakes and Streams
Troy Naperala, Engineer, URS Corporation
Thad Beard, City Manager, City of Otsego
I work in the DEQ's Office of the Great Lakes, as the Area of Concern Coordinator for the Kzoo River.

Many thanks!
-John

John Riley MI Dep't of Environmental Quality Office of the Great Lakes 517-335-4122 rileyj2@michigan.gov

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

09/06/2012 01:06 PM

To Paul Bucholtz

cc JAMES SARIC, "Garry T. Griffith", "Mark P. Brown", "Erickson, Michael", "VanDewalker, Heather", "Hill, Sarah", "Amber, Danielle"

bcc

Subject Preliminary Response to MDEQ Comments on the Area 1 Alternatives Screening Technical Memorandum (ASTM)

Dear Mr. Bucholtz,

On behalf of Mike Erickson, please find attached a *Preliminary Response to MDEQ Comments on the Area 1 Alternatives Screening Technical Memorandum (ASTM)*. A hardcopy will be sent to you today via Fed Ex.

Should you have any questions please contact Mike directly at your convenience.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

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restricted by law. Preliminary Response to MDEQ ASTM Comments_090612.pdf

"Riley, John (DEQ)" <RILEYJ2@michigan.gov> 09/10/2012 10:26 AM To "Trumble, Luke (DEQ)", "Fusco, Mario (DEQ)", "Mills, Mark (DNR)", "Smith, Kregg (DNR)", "Bucholtz, Paul (DEQ)", JAMES SARIC, Susan Virgilio, Marc Tuchman, "Sarkipato, Ernest (DEQ)", "Haroldson, Derek (DEQ)", "Naperala, Troy (troy.naperala@urs.com)", "tbeard@cityofotsego.org", "Broekhuizen, Dan"

bcc

Subject Otsego City Dam removal discussion 9/28 AM

cc "Riley, John (DEQ)"

Good morning all-

Thanks for responding to my Doodle poll. It looks like the best time to get everyone together will be Friday morning, September 28 at 10 AM Eastern. Please reserve this date and time on your calendar. For those of you that may be calling in from Chicago (or making the trip) that's 9 AM Central.

As mentioned below, we will meet at the Plainwell DNR office for discussions, with the goal of everyone coming to agreement on the general order of staging for the project and assessment of the costs involved. I anticipate this may last about an hour and a half. Afterwards, we can go to the dam site if needed.

I will put out an agenda about a week prior to the meeting, with conference call information. If you have any specific items you want to make sure are on the agenda, please let me know right away. I look forward to seeing and talking to you on the 28th.

Many thanks, -John

John Riley MI Dep't of Environmental Quality Office of the Great Lakes 517-335-4122 rileyj2@michigan.gov

From: Riley, John (DEQ)

Sent: Thursday, August 30, 2012 2:55 PM

To: Trumble, Luke (DEQ); Fusco, Mario (DEQ); Mills, Mark (DNR); Smith, Kregg (DNR); Bucholtz, Paul (DEQ); JAMES SARIC (Saric.James@epamail.epa.gov); 'virgilio.susan@epa.gov'; tuchman.marc@epa.gov;

Sarkipato, Ernest (DEQ); Haroldson, Derek (DEQ); Naperala, Troy (troy.naperala@urs.com);

tbeard@cityofotsego.org

Subject: Otsego City Dam removal discussion

Colleagues-

I am proposing to hold a meeting at the Plainwell office of the Michigan DNR during the last week of September or the first week of October. The purpose is to discuss the staging and costs of the removal of the Otsego City dam. The idea is that we would sit down for the majority of the discussion, then move out to the dam site for further talks. This will be a very important discussion as we begin to seek funding and permits for the project. Please bring any engineering or other relevant technical information you may have.

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http://doodle.com/7vq5vititv8c49kg

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I will work up an agenda prior to the meeting and send this, along with directions to the DNR Plainwell office in advance of the meeting. Please let me know if you have any questions or need additional information.

Here's a quick who's who for the people on this list (and please let me know if you think I missed someone who needs to be in on this!):

Luke Trumble and Mario Fusco, DEQ Dam Safety program

Mark Mills, DNR Wildlife division

Kregg Smith, DNR Fisheries

Paul Bucholtz, DEQ Superfund

Jim Saric, EPA Superfund

Susan Virgilio, EPA Legacy Act/Kzoo River AOC Liaison, Great Lakes National Program Office

Marc Tuchman, EPA Legacy Act, GLNPO

Ernie Sarkipato, DEQ Kzoo District Floodplain engineer

Derek Haroldson, DEQ Kzoo District Inland Lakes and Streams

Troy Naperala, Engineer, URS Corporation

Thad Beard, City Manager, City of Otsego

I work in the DEQ's Office of the Great Lakes, as the Area of Concern Coordinator for the Kzoo River.

Many thanks!
-John

John Riley
MI Dep't of Environmental Quality
Office of the Great Lakes
517-335-4122
rileyj2@michigan.gov

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

09/11/2012 03:50 PM

To JAMES SARIC, Paul Bucholtz

cc "Garry T. Griffith", "Erickson, Michael"

bcc

Subject Draft Agenda Area 4 Site Tour and RI-FS Work Plan Mtg

Dear Messieurs Saric and Bucholtz,

On behalf of Mike Erickson please find attached a draft proposed agenda for your site tour and meeting on September 27th.

Please let us know who from USEPA and MDEQ you are planning would attend the site tour. Also, please let us know if you have any comments on the draft agenda.

Thank you, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 D: 810.225.1981 | O: 810.229.8594

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restricted by law. Draft Agenda_Area 4 Site Tour and RI-FS Work Plan Mtg_2012 09.27.pdf

JAMES SARIC/R5/USEPA/US To Jeff.Keiser

09/12/2012 09:01 AM

cc bcc

Subject Fw: Draft Agenda_Area 4 Site Tour and RI-FS Work Plan

Mtg

Jeff:

Please forward this agenda to Frank and Patty.

Jim

----- Forwarded by JAMES SARIC/R5/USEPA/US on 09/12/2012 08:56 AM -----

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: JAMES SARIC/R5/USEPA/US@EPA, Paul Bucholtz <bucholtzp@michigan.gov>,

Cc: "Garry T. Griffith" < gtgriffi@GAPAC.com>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

Date: 09/11/2012 03:50 PM

Subject: Draft Agenda_Area 4 Site Tour and RI-FS Work Plan Mtg

Dear Messieurs Saric and Bucholtz,

On behalf of Mike Erickson please find attached a draft proposed agenda for your site tour and meeting on September 27th.

Please let us know who from USEPA and MDEQ you are planning would attend the site tour. Also, please let us know if you have any comments on the draft agenda.

Thank you, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

www.arcadis-us.com Sediment Assessment, Management & Remediation

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Draft Agenda_Area 4 Site Tour and RI-FS Work Plan Mtg_2012 09.27.pdf restricted by law.

"Amber, Danielle" <Danielle.Amber@arcadis-us. com>

09/13/2012 07:06 AM

To "Andrew D., P.E. Santini (SantiniAD@cdmsmith.com)", "Jeff.Keiser@CH2M.com"

CC JAMES SARIC, "Paul Bucholtz (bucholtzp@michigan.gov)", "Erickson, Michael"

bcc

Subject Area 3 Field Sampling

Jeff and Drew

Our field technician will be driving from Syracuse on Monday and so sampling is now anticipated to start on Tuesday (September 18) at 8am. We are planning to meet at the boat launch location on the north bank of the river just upstream of North Street (the same place that we parked and launched the boats for the Area 3 reconnaissance).

Please let me know if you have any further questions

Kind Regards

Danielle

Danielle Amber, PE (MI) | Project Civil Engineer | danielle.amber@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI, 48116 T. 810.225.1931 | M. 734.780.4933 | F. 810.229.8837

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JAMES SARIC/R5/USEPA/US

To Paul Bucholtz (bucholtzp@michigan.gov), Jeff Keiser

(jkeiser@CH2M.com)

09/13/2012 03:25 PM CC

bcc

Subject Fw: Area 3 Field Sampling Plan

Paul and Jeff:

Take a look at the maps and revised plan. They are proposing to begin floodplain samplline downstream of M-89. I have no problem with those floodplain locations, but want to get your input. If you both are okay with that, I'll give them approval monday, as I am not in the office tomorrow. There are more transect location selected downstream of M89 with fewer samples in each. Looks like we are closer to 400 foot spacing, which may be better. Also, the deleted much of the discussion of non-PCB constituents. I have no problem waiting until we get the Area 2 RI and the white paper on non-PCB constituents to decide if we want to sample non-PCB constituents in Area 3. However, if the write-up isn't convincing I'll be asking for a duplication of the non-PCB sampling in Area 2 to be conducted in Area 3.

Jim

Cc:

----- Forwarded by JAMES SARIC/R5/USEPA/US on 09/13/2012 03:21 PM -----

From: "Amber, Danielle" < Danielle. Amber@arcadis-us.com>

To: JAMES SARIC/R5/USEPA/US@EPA, "Paul Bucholtz (bucholtzp@michigan.gov)"

<bucholtzp@michigan.gov>, "Jeff Keiser (jkeiser@CH2M.com)" <jkeiser@CH2M.com>,

"Garry Griffith (gtgriffi@GAPAC.com)" < gtgriffi@GAPAC.com>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

Date: 09/13/2012 03:02 PM Subject: Area 3 Field Sampling Plan

Mr Saric - my apologies - please see revised email below

From: Amber, Danielle

Sent: Thursday, September 13, 2012 3:51 PM

To: James A. Saric (saric.james@epa.gov); Paul Bucholtz (bucholtzp@michigan.gov); Jeff Keiser

(jkeiser@CH2M.com)

Cc: Garry Griffith (gtgriffi@GAPAC.com); Erickson, Michael

Subject: Area 3 Field Sampling Plan

Dear Mr. Saric,

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Sincerely,

Danielle

Danielle Amber, PE (MI) | Project Civil Engineer | danielle.amber@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI, 48116 T. 810.225.1931 | M. 734.780.4933 | F. 810.229.8837

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restricted by law. Area 3 Field Sampling Plan_09 13 12_FINAL.pdf



Area 3 Field Sampling Plan_09 13 12_RLSO.pdf

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov >

09/14/2012 04:13 PM

To "Erickson, Michael"

cc "Garry Griffith (gtgriffi@GAPAC.com)", "King, Todd W. (KingTW@cdmsmith.com)", "John Kern (kernstat@gmail.com) (kernstat@gmail.com)", "Bradley, John (DEQ)", "Devantier, Daria W. (DEQ)", "Jeff Keiser (ikeiser@CH2M.com)", JAMES SARIC, "Amber, Danielle"

bcc

Subject RE: Area 3 Field Sampling Plan

Michael -

MDEQ has received the revised Area 3 Proposed Survey and Field Sampling Plan. We have completed a preliminary review of the document and would like to bring the following issues to your attention with respect to the details of the sampling locations proposed by ARCADIS. These comments focus on the floodplain and bank sampling which was not discussed in detail during our call on Monday. Please note that we have added a total of 63 sampling locations which when added to the existing 50 sample locations and ARCADIS proposed 95 sample locations would result in approximately 1 soil boring or bank sample for every formerly impounded acre.

- 1) The MDEQ suggests additional sampling locations to minimize the likelihood that additional rounds of sampling will be required prior to development of a detailed FS and commencement of active remedial alternatives that are likely to be necessary--particularly for control of sources of PCBs from the previously inundated banks in Area 3.
- 2) The additional samples provide data necessary to delineate the lateral (cross-flow and long flow) limits of the extent of PCB contamination. More samples are needed along the banks.
- 3) This additional sampling is necessary to streamline decision making.
- 4) It is understood that the RPs and EPA will depend on interpolated maps of concentration distributions for much of the RI/FS evaluations. Development of reliable interpolated maps requires that areas of interest are "surrounded" by samples so that the maps are indeed <u>interpolations</u> as opposed to <u>extrapolations</u>. Generally this requires samples to be placed along the boundaries of the study area (River Banks and edge of floodplain) as well as samples placed at intermediate distances between these limits.
- 5) Based on understanding of PCB deposits at Plainwell Impoundment, it is well understood that short scale heterogeneity of PCB concentrations causes accuracy of interpolated surfaces to decrease rapidly with distance from sample data. Generally sample spacing should not be greater than approximately 100 feet.
- 6) These findings are consistent with sampling approaches used at the Hudson River and Fox Rivers, where sample spacing of less than 100 feet were necessary to adequately identify the depth of contamination and the lateral extent of PCB deposits. Both projects have used sub-100 foot sample spacing.

- 7) It is the MDEQ's belief that implementation of slightly higher sampling density at this stage of the project will facilitate EPA's goal to maintain continuous remedial progress, limiting the need for additional field work to implement pre-design sampling.
- 8) Page 9/17, Floodplain Soil Sampling,4th para. MDEQ requests that fill material in previous channel 11 be characterized with respect to the presence or absence of PCBs prior to completion of the SRI for Area 3.

I'm sure a call will be in order to discuss the revised work plan.

From: Amber, Danielle [mailto:Danielle.Amber@arcadis-us.com]

Sent: Thursday, September 13, 2012 4:01 PM

To: James A. Saric (saric.james@epa.gov); Bucholtz, Paul (DEQ); Jeff Keiser (jkeiser@CH2M.com)

Cc: Garry Griffith (qtqriffi@GAPAC.com); Erickson, Michael

Subject: Area 3 Field Sampling Plan

Mr Saric – my apologies – please see revised email below

From: Amber, Danielle

Sent: Thursday, September 13, 2012 3:51 PM

To: James A. Saric (saric.james@epa.gov); Paul Bucholtz (bucholtzp@michigan.gov); Jeff Keiser (

ikeiser@CH2M.com)

Cc: Garry Griffith (gtgriffi@GAPAC.com); Erickson, Michael

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Sincerely,

Danielle

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restricted by law. FloodplainSamplingREvisions_MDEQ_2012-09-14 Rev(0).pdf

Craig Thomas/R5/USEPA/US@EPA

09/14/2012 05:10 PM

To Craig Thomas, Paul Ruesch, SAMUEL BORRIES, KEITH LESNIAK, Don Deblasio, Megan McSeveney, Jason El-Zein, JOHN MARITOTE, Mike Ribordy, JAMES SARIC, REBECCA FREY, Michael Berkoff, Leslie Kirby-Miles, Nicole Wood, THOMAS MARKS, Sherry Fielding, John Glover, Carol Ropski, millsm, devantierd, vanotterenb, walczakj, bucholtzp, ebowman, jrhinefield, mbrowning, christopher.lantinga, merchantb, jungd, polegam, lisa_williams, Goeks.Todd, valincia_darby, Mark Johnson

cc bcc

Subject Pollution Report #18 Portage Creek Area - Progress

Attached is a Pollution Report (POLREP) regarding:

USEPA Region V Portage Creek Area Stockbridge Ave to Kalamazoo River, Kalamazoo, MI

To view this POLREP, please open the attachment. Lotus Notes Users, please Launch the attachment.

For additional information regarding this site, please visit the website by clicking on this link: http://www.epaosc.org/portagecreekarea





portagecreekarea_polrep_18.htm portagecreekarea_polrep_18_IMG_4034.JPG





portagecreekarea_polrep_18_IMG_4030.JPG portagecreekarea_polrep_18_IMG_3967.JPG

<Jeff.Keiser@CH2M.com>

09/16/2012 12:33 PM

cc Grant.Koster

hcc

Subject FW: Area 3 Field Sampling Plan

To Patricia. White, Frank. Dillon, JAMES SARIC

Attached are MDEQs comments on the Area 3 FSP.

Jim I agree we may need more bank sampling but not sure I agree with the placement or justification. The following are my initial thoughts and do not include input from Patty or Frank. I am sending these to start the discussion, Frank and Patty will need to provide input as well.

- 1) I would prefer we see the results of the sampling and plan a more focused effort later that may include more sediment sampling if needed.
- 2) I agree, but would like to see the justification, after reviewing the recon results I am not sure the placement incorporates the recon results
- 3) I think we can wait for a Spring sampling event and it would be preferred to evaluate the results prior. Utilize the phased approach.
- 4) Boundary interpolations are more important during design, I will check on Fox, I think this was done as predesign sampling.
- 5) 100 feet is pretty tight, again would prefer to see the results from the plan.
- 6) JK will check Fox, Patty do you recall what was done on the Hudson?
- 7) It might be a worthy goal to eliminate predesign sampling but doesn't usually work. We need to concentrate on what we need for RI decision making.
- 8) Agree.

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: Bucholtz, Paul (DEQ) [mailto:BUCHOLTZP@michigan.gov]

Sent: Friday, September 14, 2012 4:13 PM

To: Erickson, Michael

Cc: Garry Griffith (gtgriffi@GAPAC.com); King, Todd W. (KingTW@cdmsmith.com); John Kern (kernstat@gmail.com) (kernstat@gmail.com); Bradley, John (DEQ); Devantier, Daria W. (DEQ); Keiser,

Jeff/MKE; James A. Saric (saric.james@epa.gov); 'Amber, Danielle'

Subject: RE: Area 3 Field Sampling Plan

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Sent: Thursday, September 13, 2012 4:01 PM

To: James A. Saric (saric.james@epa.gov); Bucholtz, Paul (DEQ); Jeff Keiser (jkeiser@CH2M.com)

Cc: Garry Griffith (gtgriffi@GAPAC.com); Erickson, Michael

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From: Amber, Danielle

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Cc: Garry Griffith (gtgriffi@GAPAC.com); Erickson, Michael

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Sincerely,

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Danielle Amber, PE (MI) | Project Civil Engineer | danielle.amber@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI, 48116 T. 810.225.1931 | M. 734.780.4933 | F. 810.229.8837

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restricted by law. FloodplainSamplingREvisions_MDEQ_2012-09-14 Rev(0).pdf

"Amber, Danielle" <Danielle.Amber@arcadis-us.com>

09/17/2012 11:46 AM

To "Garry Griffith (gtgriffi@GAPAC.com)", "Paul Bucholtz (bucholtzp@michigan.gov)", JAMES SARIC, "Jeff.Keiser@CH2M.com", "Anthony, Bonner", "Scoville, Michael", "Erickson, Michael"

CC

bcc

Subject Declined: Area 3 Field Sampling

Paul

We would like to have a short call with you and Jeff to discuss the proposed additional soil sample locations that you outlined in your email on Friday afternoon. Please let me know if 1 pm tomorrow afternoon will work for you.

Mike Erickson and Jim Saric are, I believe, both out on vacation for the rest of the week, but are copied on this invite for information.

Many thanks

Danielle

Danielle Amber, PE (MI) | Project Civil Engineer | danielle.amber@arcadis-us.com<mailto:danielle.amber@arcadis-us.com>
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JAMES SARIC/R5/USEPA/US

09/17/2012 02:31 PM

To "Garry Griffith (gtgriffi@GAPAC.com)", "'Amber, Danielle"', "Erickson, Michael"

cc "Jeff Keiser (jkeiser@CH2M.com)", "Bucholtz, Paul (DEQ)"

bcc JAMES SARIC

Subject Area 3 Field Sampling Plan

Garry,

EPA has received the 9/14/12 version of the Area 3 Sampling Plan, as well as the 9/14/12 email from Paul Bucholtz proposing additional flood plain and bank samples.

Based upon today's discussions with yourself, as well as Paul Bucholtz of MDEQ, EPA is providing approval for GP/Arcadis to conduct the flood plain sampling as proposed in the 9/14/12 sampling plan.

The 9/14/12 email submitted by MDEQ does not eliminate any of the GP/Arcadis proposed locations. However, there are additional bank and floodplain samples proposed to fully characterize Area 3 in support of the Remedial Investigation report. EPA recommends GP/Arcadis collect the additional non-bank floodplain samples. Regarding the bank samples, EPA agrees with MDEQ that further banks samples are required to fully characterize Area 3. We recommend having further discussion on this topic to reach resolution in order to conduct additional bank sampling this fall or next spring, if necessary.

thanks Jim Saric EPA Region V 312.886-0992

"Griffith, Garry T."
<gtgriffi@GAPAC.com>
09/17/2012 03:55 PM

To JAMES SARIC

СС

bcc

Subject RE: Area 3 Field Sampling Plan

Thanks Jim.

From: Saric.James@epamail.epa.gov [mailto:Saric.James@epamail.epa.gov]

Sent: Monday, September 17, 2012 3:31 PM

To: Griffith, Garry T.; 'Amber, Danielle'; Erickson, Michael **Cc:** Jeff Keiser (jkeiser@CH2M.com); Bucholtz, Paul (DEQ)

Subject: Area 3 Field Sampling Plan

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thanks Jim Saric EPA Region V 312.886-0992

dayle harrison daylelharrison@gmail.com>
09/19/2012 11:08 AM

To tburns, smcneal, pvaneck, mdeyoung, dkapenga, mthiele, dblack, tjessup, bsage, jcampbell, lcjones, rsarro, Becky Blaine, JAMES SARIC, "Bucholtz, Paul (DNRE)"

cc bcc

Subject Re: KRPA comments from Dayle Harrison re: Georgia Pacific settlement offer proposal

September 19, 2012,

Dear Mr. DeYoung, Chairman and Board members,

Thanks for holding the Kalamazoo River Superfund meeting tomorrow, September 20th at the Allegan Township Offices on 118th street beginning at 9:30. Unfortunately, as you may know, US EPA will not be able to attend. I called Jim Saric, US EPA project manager, for the Kalamazoo "Superfund" site last Friday, the 14th of September. He indicated that he had not been contacted. He will be out of the office until September 24, 2012.

I thought at the last meeting, it was the intent Allegan County Board of Commissioners (ACBC) to make arrangements with US EPA to make a presentation at some future pubic meeting. An invitation to the Michigan Department of Environmental Quality would be helpful as well. This special meeting would have been an ideal time. Both Jim Saric of US EPA and Paul Bucholtz, Senior Environmental Analyst of the Superfund Section of the MDEQ, have indicated a willingness to attend the ACBC meeting and make presentations relating to the critical issues regarding the future restoration of the Kalamazoo River. That invitation needs to come from the ACBC. Jim Saric can be reached by phone at: 312-886-0992 and cell at 847-612-3970. Paul Bucholtz contact number is 517-373-8174. It is imperative that the ACBC hear directly from the State and Federal Agencies that are in charge of the Cleanup.

The Georgia Pacific LLC (GP) proposal amounts to a bailout of their responsibility under the Comprehensive Environmental Response Compensation

and Liability Act commonly called "Superfund". An environmentally sound cleanup may have remaining costs close to 1 billion dollars. Under the joint and several liability provisions of the law, Georgia Pacific can be held liable for the entire remaining cost of the cleanup. GP could then seek to recover their costs from other potential responsible parties. The other known parties contributed only a small part of pollution, probable less than 5 percent.

Frankly, if the ACBC should decide to support the GP \$150 million dollar settlement proposal, it will result in more delay and could significantly jeopardize a meaningful cleanup and restoration of the river. Should GP be successful in their lobbying effort and obtain approval from the US Department of Justice for the settlement, 80 percent of the remaining PCB contamination would remain in the river, basically forever. Because Superfund is broke there would be no public monies to cleanup the toxic PCBs sediments in the river. Beside taxpayers should not be paying for the cleanup, especially since GP has the resources and financial ability to full-fill it's obligation under the law. The bailout would likely amount to over 700 million dollars.

Currently, determining actual costs of the cleanup is not clear. This is because Remedial Investigations and Feasibility Studies have not been completed for the former City of Otsego, MDNR Otsego, and Trowbridge Impoundment, as well as the City of Allegan and Lake Allegan impoundments and areas downstream. These studies should be completed within a couple of years. US EPA and the MDEQ have not decided on or given any approval of any Proposal Remedial Cleanup Plan at any of these areas, nor have public hearings been held.

I appreciate you ongoing involvement in the potential restoration of this magnificent resource that flows through Allegan County. Once restored, the River would be a tremendous tourist attraction and improve dramatically our quality of life. We deserve nothing less. I look forward to more discussions.

Sincerely yours,

Dayle Harrison, Pres.

Kalamazoo River Protection Association

email: <u>daylelharrison@gmail.com</u> 6<u>16-218-4444</u>

"Eves, Megan" <Megan.Eves@arcadis-us.co m>

09/19/2012 04:14 PM

To JAMES SARIC

cc "Griffith, Garry T.", "Erickson, Michael", "Smith, Gail A."

bcc

Subject Kalamazoo River: Communication Materials for Area 3 Field

Work

Mr. Saric,

On behalf of Garry Griffith, I'm sending final versions of two items we have developed to support our field crew as they begin work in Area 3 of the Kalamazoo River Site.

We've developed an informational sign for the crew to post in the windows of their vehicles when they park along the river. The sign provides basic information so residents and others along the river know why our vehicles are present, the timeframe people can expect to see us along the river, and where to go to get more information. You'll see that we have included contact information for both you and Garry Griffith, as well as the project website and an e-mail address people can use to submit questions.

As a supplemental tool, we've also created cards that our crew will have on hand in the event they encounter people in the field who want more information. The card echoes the information on the vehicle poster, and provides basic information about why our team is present and where people can go to learn more about the project.

Please let Garry know if you have any questions. Regards, Megan

Megan Eves | Principal Scientist - Environmental Communications | megan.eves@arcadis-us.com ARCADIS U.S., Inc. | 2701 Kavanaugh Boulevard, Suite 300 | Little Rock, AR, 72205 T. 501.296.9324 | M. 501.218.3412 | F. 501.296.9326 www.arcadis-us.com

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restricted by law. Area 3 Parking Poster - 18Sept2012.pdfSite Worker Wallet Card-09.19.12.pdf

To Max Thiele, JAMES SARIC, "Bucholtz, Paul (DNRE)" cc bcc

Subject Re: Who do we contact @ EPA and MDEQ?????

Max,

Thanks for your effort. Jim Saric phone at EPA is <u>312-886-0992</u> and cell is <u>847-612-3970</u>. Paul Bucholtz phone is <u>517-373-8174</u>. Paul is a Senior Environmenal Quality Analyst with the remediation division of the MDEQ.

It would be helpfull to request an update relating to ALLEGAN COUNTY. I copied them on the email per above. I know there are studies being conducted at the former impoundments by GP at the City of Otsego, MDNR Otsego Twp and MDNR Trowbridge planned next year. Jay Wesley (phone 269685-6851) from fisheries in Plainwell would be another person to invite to discuss plans to improve the fishery between Allegan and the City of Kalamazoo once the dams are removed. I was glad to see a good turnout. I believe the next meeting will be better attended by the local municipalities and the public. I was pleased with the commissioners efforts on this matter. Please contact me, if I can be of further assistance. Best regards, Dayle Harrison, KRPA Pres.

On Thu, Sep 20, 2012 at 4:32 PM, Max Thiele MThiele@allegancounty.org wrote:
Dayle, if you have any address/email information for Saric and Bucholtz shoot them to me will you.
Don't want this to languish while people are trying to find out where to send the letters.
Max

From: dayle harrison [mailto:daylelharrison@gmail.com]

Sent: Wed 9/19/2012 12:08 PM

To: Terry Burns; Steven McNeal; Paul VanEck; Mark DeYoung; Dean Kapenga; Max Thiele; Don Black; Tom Jessup; bsage@allegacounty.org; Jon Campbell; Casey Jones; Robert Sarro; Becky Blaine; Saric.James@epamail.epa.gov; Bucholtz, Paul (DNRE)

Subject: Re: KRPA comments from Dayle Harrison re: Georgia Pacific settlement offer

proposal

Dear Mr. DeYoung, Chairman and Board members,

Thanks for holding the Kalamazoo River Superfund meeting tomorrow, September 20th at the Allegan Township Offices on 118th street beginning at 9:30. Unfortunately, as you may know, US EPA will not be able to attend. I called Jim Saric, US EPA project manager, for the Kalamazoo "Superfund" site last Friday, the 14th of September. He indicated that he had not been contacted. He will be out of the office until September 24, 2012.

I thought at the last meeting, it was the intent Allegan County Board of Commissioners (ACBC) to make arrangements with US EPA to make a presentation at some future pubic meeting. An invitation to the Michigan Department of Environmental Quality would be helpful as well. This special meeting would have been an ideal time. Both Jim Saric of US EPA and Paul Bucholtz, Senior Environmental Analyst of the Superfund Section of the MDEQ, have indicated a willingness to attend the ACBC meeting and make presentations relating to the critical issues regarding the future restoration of the Kalamazoo River. That invitation needs to come from the ACBC. Jim Saric can be reached by phone at: 312-886-0992 and cell at 847-612-3970. Paul Bucholtz contact number is 517-373-8174. It is imperative that the ACBC hear directly from the State and Federal Agencies that are in charge of the Cleanup.

The Georgia Pacific LLC (GP) proposal amounts to a bailout of their responsibility under the Comprehensive Environmental Response Compensation and Liability Act commonly called "Superfund". An environmentally sound cleanup may have remaining costs close to 1 billion dollars. Under the joint and several liability provisions of the law, Georgia Pacific can be held liable for the entire remaining cost of the cleanup. GP could then seek to recover their costs from other potential responsible parties. The other known parties contributed only a small part of pollution, probable less than 5 percent.

Frankly, if the ACBC should decide to support the GP \$150 million dollar settlement proposal, it will result in more delay and could significantly jeopardize a meaningful cleanup and restoration of the river. Should GP be successful in their lobbying effort and obtain approval from the US Department of Justice for the settlement, 80 percent of the remaining PCB contamination would remain in the river, basically forever. Because Superfund is broke there would be no public monies to cleanup the toxic PCBs sediments in the river. Beside taxpayers should not be paying for the cleanup, especially since GP has the resources and financial ability to full-fill it's obligation under the law. The bailout would likely amount to over 700 million dollars.

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Sincerely yours,

Dayle Harrison, Pres.

Kalamazoo River Protection Association

email: daylelharrison@gmail.com

616-218-4444

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<Jeff.Keiser@CH2M.com>

To JAMES SARIC

09/23/2012 01:39 PM

cc bcc

Subject Area 3 Feild Sampling

Jim we had a call with GP and MDEQ on Wed. GP is considering the additional locations but I had the impression they will probably defer until spring. Mike Erickson was not on either so no decisions were made.

Arcadis is going to start field work this week with soil sampling MDEQ has not submitted comments on the sediments, we may discuss Thursday at the meeting.

I am taking off Monday, try my cell if you need to reach me, not sure of how much coverage I will have so leave a message and I will get back to you as soon as I can.

I will be in for our normally scheduled Tuesday call.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

JAMES SARIC/R5/USEPA/US To Jeff.Keiser

СС

09/24/2012 08:40 AM bcc

Subject Re: Area 3 Feild Sampling

Thanks.

Jim we had a call with GP and MDEQ o... 09/23/2012 01:39:10 PM

From: <Jeff.Keiser@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

09/23/2012 01:39 PM Date: Subject: Area 3 Feild Sampling

Jim we had a call with GP and MDEQ on Wed. GP is considering the additional locations but I had the impression they will probably defer until spring. Mike Erickson was not on either so no decisions were made.

Arcadis is going to start field work this week with soil sampling MDEQ has not submitted comments on the sediments, we may discuss Thursday at the meeting.

I am taking off Monday, try my cell if you need to reach me, not sure of how much coverage I will have so leave a message and I will get back to you as soon as I can.

I will be in for our normally scheduled Tuesday call.

JK

Jeff Keiser **Project Manager** 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct - 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com

Solutions without Boundaries

<Jeff.Keiser@CH2M.com>

To JAMES SARIC

09/25/2012 04:19 PM

cc bcc

Subject Area 3 Sediment Sampling

Jim, I just heard from my field staff that Arcadis is planning on starting sediment sampling next week. They probably don't know about the 21 added locations we just received from Mike a couple of minutes ago, but wanted to give you a heads up.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
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e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

JAMES SARIC/R5/USEPA/US To JAMES SARIC

СС

09/26/2012 08:59 AM

bcc

Subject Fw: Draft Agenda_Area 4 Site Tour and RI-FS Work Plan

Mtg

---- Forwarded by JAMES SARIC/R5/USEPA/US on 09/26/2012 08:59 AM -----

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: JAMES SARIC/R5/USEPA/US@EPA, Paul Bucholtz

sucholtzp@michigan.gov>,

Cc: "Garry T. Griffith" < gtgriffi@GAPAC.com>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

Date: 09/11/2012 03:50 PM

Subject: Draft Agenda Area 4 Site Tour and RI-FS Work Plan Mtg

Dear Messieurs Saric and Bucholtz,

On behalf of Mike Erickson please find attached a draft proposed agenda for your site tour and meeting on September 27th.

Please let us know who from USEPA and MDEQ you are planning would attend the site tour. Also, please let us know if you have any comments on the draft agenda.

Thank you, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

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restricted by law. Draft Agenda_Area 4 Site Tour and RI-FS Work Plan Mtg_2012 09.27.pdf

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov >

09/26/2012 03:43 PM

To "Erickson, Michael"

cc JAMES SARIC, "John Kern (kernstat@gmail.com) (kernstat@gmail.com)", "King, Todd W. (KingTW@cdmsmith.com)", "Bradley, John (DEQ)", "Jeff.Keiser@CH2M.com", "Griffith, Garry T."

bcc

Subject MDEQ Suggested Revisions to Area 3 Sediment Sampling

Mike,

The attached power point file includes suggested additional locations for sediment sampling in the Kalamazoo River and Pine Creek.

- 1. It is suggested that for all transects a minimum of 4 locations be subjected to laboratory chemical analysis. These should include a location at either end of the transect and the sampling locations should be randomly placed within 10 feet of the river bank. The remaining two locations should be approximately equally spaced within the "mid channel" area. Randomization within either half of the channel would be good but not necessary.
- 2. Additional cores collected along each transect should be described and logged per standard procedures used at the site to date.
- 3. The sampling plan identifies sediment sampling locations within the Pine Creek Impoundment. These cores should be sectioned and subjected to laboratory chemical analysis.
- 4. A set of 4 additional transects are identified on Figure 2-C, where the MDEQ recommends analysis of samples within 10 feet of the bank. With the understanding that sample collection efforts in this area may be unproductive.
- 5. A series of additional core locations are suggested in south and south-east portion of Pine Creek. The objective of these samples is to provide even spatial coverage of the area so that PCB distributions can be adequately delineated. It is likely that much of this area contains PCB concentrations exceeding levels likely to trigger active remediation. Given that this area is within the wetted channel (not floodplain only), the sampling is necessary for determining the nature and extent of impact in this poorly understood segment of the impoundment.

I anticipate that we will have some time tomorrow for a preliminary discussion.



SedimentSamplingRevisions_MDEQ_2012-09-25.pptx

Craig Thomas/R5/USEPA/US@EPA

09/28/2012 04:48 PM

To Craig Thomas, Paul Ruesch, SAMUEL BORRIES, KEITH LESNIAK, Don Deblasio, Megan McSeveney, Jason El-Zein, JOHN MARITOTE, Mike Ribordy, JAMES SARIC, REBECCA FREY, Michael Berkoff, Leslie Kirby-Miles, Nicole Wood, THOMAS MARKS, Sherry Fielding, John Glover, Carol Ropski, millsm, devantierd, vanotterenb, walczakj, bucholtzp, ebowman, jrhinefield, mbrowning, christopher.lantinga, merchantb, jungd, polegam, lisa_williams, Goeks.Todd, valincia_darby, Mark Johnson

СС

bcc

Subject Pollution Report #19 Portage Creek Area - Progress

Attached is a Pollution Report (POLREP) regarding:

USEPA Region V Portage Creek Area Stockbridge Ave to Kalamazoo River, Kalamazoo, MI

To view this POLREP, please open the attachment. Lotus Notes Users, please Launch the attachment.

For additional information regarding this site, please visit the website by clicking on this link: http://www.epaosc.org/portagecreekarea





portagecreekarea_polrep_19.htm portagecreekarea_polrep_19_IMG_4063.JPG





portagecreekarea_polrep_19_IMG_4096.JPG portagecreekarea_polrep_19_IMG_4076.JPG

JAMES SARIC/R5/USEPA/US

To Jeff.Keiser

10/01/2012 07:34 AM

cc bcc

Subject Re: FW: Bank and Floodplain info

I would send him an email back first letting him know you can do some digging for it, but letting him know how the information may not be applicable as you told me last week. Then see if he still needs it. I may have the QEA modeling report at my desk. Don't want you to spend too much time on this, as you have other priorities.

Jim

-----< Jeff.Keiser@CH2M.com> wrote: -----

To: JAMES SARIC/R5/USEPA/US@EPA

From: <Jeff.Keiser@CH2M.com> Date: 09/30/2012 03:50PM

Subject: FW: Bank and Floodplain info

Jim, just checking are you ok with this? I am going to have to dig for the info.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct - 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
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----Original Message----

From: Milton Clark [mailto:mclark-59@comcast.net]

Sent: Friday, September 28, 2012 12:33 PM

To: Keiser, Jeff/MKE Cc: Paul Bucholtz

Subject: Bank and Floodplain info

Jeff,

Per our convervation, can you send me the copies of the bank erosion work you did a few years ago and QEA modeling work describing uncertainty of PCB contributions from floodplains and banks?

Good to see you.

Thanks,

Milt

Sent from my iPhone

Ramon Mendoza/R5/USEPA/US To Mike Ribordy

cc hcc

10/02/2012 11:55 AM

Subject Fw: Plainwell Bank Monitoring - State and Trustee comments

Here you go. I will be back tomorrow so we can discuss with Sam. its about .5 page longer than the draft (Sept version which did not cause upset from the Paper Company RP).

Ramon

-----Forwarded by Ramon Mendoza/R5/USEPA/US on 10/02/2012 11:53AM -----

To: "'Hritsuk, Eric'" < Eric. Hritsuk@arcadis-us.com >, "Bucholtz, Paul (DEQ)"

*BUCHOLTZP@michigan.gov>, "Williams, Lisa (lisa_williams@fws.gov)" lisa_williams@fws.gov>, "Devantier, Daria W. (DEQ)" <DEVANTIERD@michigan.gov>, Todd Goeks <todd.goeks@noaa.gov>, "Alfano, Judith (DEQ)" <ALFANOJ@michigan.gov>, "Mills, Mark (DNR)" <MILLSM@michigan.gov>, 'Julie Sims' <julie.sims@noaa.gov>, "Esposito, Anthony" <Anthony.Esposito@arcadis-us.com>, JAMES SARIC/R5/USEPA/US@EPA, "Synk, Polly (AG)" <SynkP@michigan.gov>, "Suardini, Ej" <Ej.Suardini@arcadis-us.com>

From: "Hanshue, Sharon (DNR)" < HanshueS@michigan.gov>

Date: 10/01/2012 10:38AM

Cc: "Erickson, Michael" < Michael. Erickson@arcadis-us.com>, "Griffith, Garry T." < gtgriffi@GAPAC.com>,

Ramon Mendoza/R5/USEPA/US@EPA, SAMUEL BORRIES/R5/USEPA/US@EPA

Subject: Plainwell Bank Monitoring - State and Trustee comments

(See attached file: Final draft Plainwell TCRA Bank Monitoring comments .doc)

In preparation for our Oct 4th conference call regarding the Plainwell bank monitoring effort, please find attached the final draft comments from the DNR, DEQ and NRD Trustees.

Sharon Hanshue Chief, Office of Legal Services 517-335-4058



hanshues@michigan.gov Final draft Plainwell TCRA Bank Monitoring comments .doc

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

10/02/2012 04:36 PM

To JAMES SARIC

cc Paul Bucholtz, "Garry T. Griffith", "Mark P. Brown", "Erickson, Michael"

bcc

Subject Area 3 Field Sampling Plan

Dear Mr. Saric,

On behalf of Mike Erickson, please find attached a revised Area 3 Field Sampling Plan that incorporates additional soil and sediment sampling locations based on discussion with USEPA and MDEQ.

Please review this at your earliest convenience and contact Mike Erickson with any questions. Mike will be calling you to discuss this revised plan for USEPA approval. Hard copies will be provided by FedEx.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

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restricted by law. Area 3 Field Sampling Plan_10.02.12.pdf

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

10/03/2012 10:10 AM

To JAMES SARIC

cc "Devantier, Daria W. (DEQ)", "Jeff.Keiser@CH2M.com"

bcc

Subject Allegan Co. Board Ltr.

Jim,

The letter I referenced. I will communicate to my management that you prefer a presentation at a upcoming board meeting, over sending a written response. I trust we will follow your lead.

Paul Bucholtz MDEQ-RD Superfund Section



517-373-8174 AlleganBoardRequest.pdf

Ramon Mendoza/R5/USEPA/US

10/03/2012 04:27 PM

To SAMUEL BORRIES

cc Mike Ribordy

bcc

Subject Fw: Plainwell TCRA corrective action notes - Bucholtz photo

This is in the area at the former Dam house....State is recommending rock relocation. I agree.

Dont have pictures from RA 7b, 8B, and 9B

Ramon

----- Forwarded by Ramon Mendoza/R5/USEPA/US on 10/03/2012 04:25 PM -----

From: "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Date: 09/19/2012 06:42 AM

Subject: FW: Plainwell TCRA corrective action notes - first draft

```
----Original Message----
From: Bucholtz, Paul (DEQ)
Sent: Thursday, September 13, 2012 3:20 PM
To: Hanshue, Sharon (DNR); Alfano, Judith (DEQ); Williams, Lisa; Devantier, Daria W. (DEQ); Dawson, Nicolas (DEQ); Reznick, Ralph (DEQ)
Cc: Freiburger, Chris (DNR)
Subject: RE: Plainwell TCRA corrective action notes - first draft
I am going to send some pics I took at the dam today.
This images showes the rock slipping off the fabric.

From: Hanshue, Sharon (DNR)
Sent: Thursday, September 13, 2012 2:40 PM
To: Alfano, Judith (DEQ); Bucholtz, Paul (DEQ); Williams, Lisa; Devantier,
```

Sent: Thursday, September 13, 2012 2:40 PM
To: Alfano, Judith (DEQ); Bucholtz, Paul (DEQ); Williams, Lisa; Devantier, Daria W. (DEQ); Dawson, Nicolas (DEQ); Reznick, Ralph (DEQ)
Cc: Freiburger, Chris (DNR)
Subject: RE: Plainwell TCRA corrective action notes - first draft

Does anyone else have any comments they want included? I will send this out tomorrow morning for use on our Monday conf call, it will continue to be a draft document. Thanks to Judie and Paul for offering suggestions.

Sharon Hanshue Chief, Office of Legal Services 517-335-4058 hanshues@michigan.gov

```
----Original Message----
From: Alfano, Judith (DEQ)
Sent: Wednesday, September 12, 2012 9:23 AM
To: Bucholtz, Paul (DEQ); Hanshue, Sharon (DNR); Williams, Lisa; Devantier,
Daria W. (DEQ); Dawson, Nicolas (DEQ); Reznick, Ralph (DEQ)
Cc: Freiburger, Chris (DNR)
Subject: RE: Plainwell TCRA corrective action notes - first draft
```

Here are a few suggested edits, I added the purple loosestrife language to P'well # 2, even though the state doesn't have post vegetation monitoring duties here.

----Original Message---From: Bucholtz, Paul (DEQ)
Sent: Wednesday, September 12, 2012 9:13 AM
To: Hanshue, Sharon (DNR); Williams, Lisa; Devantier, Daria W. (DEQ); Alfano, Judith (DEQ); Dawson, Nicolas (DEQ); Reznick, Ralph (DEQ)
Cc: Freiburger, Chris (DNR)

Looks good Sharon, I don't see that you missed anything.

Subject: RE: Plainwell TCRA corrective action notes - first draft

One adjustment is the language for the former dam site. Technically, the river is running N/S in that area and the bank of interest is on the West side of the river. I would modify the language along these lines.

"The rock slope on the downstream facing left bank, at the former powerhouse, appears to be slumping and should be investigated to determine if a seep or bank failure is evident and institute corrective action."

----Original Message---From: Hanshue, Sharon (DNR)
Sent: Wednesday, September 12, 2012 9:06 AM
To: Williams, Lisa; Bucholtz, Paul (DEQ); Devantier, Daria W. (DEQ); Alfano, Judith (DEQ); Dawson, Nicolas (DEQ); Reznick, Ralph (DEQ)
Cc: Freiburger, Chris (DNR)
Subject: Plainwell TCRA corrective action notes - first draft
Importance: High

Attached are notes from the discussion yesterday afternoon. Please comment on this draft, I would like to be able to share this w EPA and Arcadis by (before) the end of the week in prep for our 9/17 call (1pm), assuming it will still be in draft form but help define the agenda for Monday. Thanks!

Sharon Hanshue Chief, Office of Legal Services 517-335-4058 hanshues@michigan.gov



Fabric.JPG

SAMUEL **BORRIES/R5/USEPA/US**

10/03/2012 04:34 PM

To Ramon Mendoza

cc Mike Ribordy

bcc

Subject Fw: Kalamazoo River Site - EPA 2012 Demand Letter

Attached demand letter sent to Weyerhaeuser for unreimbursed cost associated with Plainwell Impoundment. You will probably have to work with Leslie on this.

---- Forwarded by SAMUEL BORRIES/R5/USEPA/US on 10/03/2012 04:32 PM -----

Leslie Kirby-Miles/R5/USEPA/US From:

Valerie Mullins/R5/USEPA/US@EPA, SAMUEL BORRIES/R5/USEPA/US@EPA, To:

Date: 10/03/2012 04:29 PM

Fw: Kalamazoo River Site - EPA 2012 Demand Letter Subject:

FYI.

Leslie A. Kirby-Miles Associate Regional Counsel Region 5, Office of Regional Counsel U.S. Environmental Protection Agency 77 W. Jackson Blvd. (C-14J) Chicago, IL 60604

Phone (312) 353-9443 Fax (312) 582-5195

----- Forwarded by Leslie Kirby-Miles/R5/USEPA/US on 10/03/2012 04:29 PM -----

"Jackowski, Joseph" < Joseph. Jackowski@weyerhaeuser.com> From:

To: Leslie Kirby-Miles/R5/USEPA/US@EPA

"Schneider, Mark W. (Perkins Coie)" < MWSchneider@perkinscoie.com> Cc:

Date: 10/03/2012 04:24 PM

Kalamazoo River Site - EPA 2012 Demand Letter Subject:

Leslie – A copy of my reply for your files

Joseph P. Jackowski Senior Legal Counsel Weyerhaeuser Company Law Department P.O. Box 9777 Federal Way, WA 98077-9777

phone: 253-924-3461

fax to email: 253-928-2247



<Jeff.Keiser@CH2M.com>

10/03/2012 09:10 PM

To JAMES SARIC cc BUCHOLTZP

bcc

Subject

Jim, this is from my field staff today, I need to get some clarification on the process below. Will provide that once I get a response, but wanted to give you an idea of what is going on.

JK

Arcadis completed 12 cores today.

Floodplain cores:OFP-075, OFP-074, OFP-073, OFP-072, OFP-071, OFP-078, OFP-070, OFP-079, and OFP-069.

Stream bank samples: OTBN-24, OTBS-24, and OTBS-32.

They started a new coring method this week:

- 1. Advance Lexan tube till compaction begins, remove lexan.
- 2. Advance second Lexan tube till refusal.
- 3. Advance auger till refusal or a brake through occurs through the hard surface,
- 4. If breakthrough, then advance Lexan to refusal.

The advance of the auger was usually stopped by coarse sand and cobble. There was only one sample where we ended up advancing a third lexan tube. This process is taking quite a bit of time. So this could extend the sampling window as well.

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

<Jeff.Keiser@CH2M.com>

To JAMES SARIC

10/03/2012 10:40 PM

cc Patricia.White, Frank.Dillon

bcc

Subject FW: Otsego Sampling

Jim, just an FYI we are resampling a couple of locations to get better penetration. This is the revised procedure I forwarded to you earlier. Once I talk to Mike I will have a better description of what is being done.

JK

Jeff Keiser
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Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: Amber, Danielle [mailto:Danielle.Amber@arcadis-us.com]

Sent: Wednesday, October 03, 2012 11:05 AM

To: Keiser, Jeff/MKE; Andrew D., P.E. Santini (SantiniAD@cdmsmith.com) **Cc:** Scoville, Michael; Skwarski, Alison; Patil, Sonal; O'Rourke, Thomas

Subject: Otsego Sampling

Jeff and Drew

We are looking to re-occupy seven of the floodplain core locations due to issues with depth of penetration last week. New cores will be collected using a hand auger at these locations and samples associated with the earlier cores will not be analyzed.

For your records, I have attached a list of the sample locations, along with the associated coordinates (note that the coordinates are in meters).

Please feel free to contact me if you have any questions.

Regards

Danielle

Danielle Amber, PE (MI) | Project Civil Engineer | danielle.amber@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI, 48116 T. 810.225.1931 | M. 734.780.4933 | F. 810.229.8837

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restricted by law. Coordinates of Floodplain Sample Locations to be Re-occupied.xlsx

Ramon Mendoza/R5/USEPA/US To Mike Ribordy, SAMUEL BORRIES

cc hcc

10/04/2012 08:27 AM

Subject Fw: Former Plainwell Impoundment and Plainwell No. 2 Dam Area Bank Conditions

FYI. We have conference call at 0930 in the EOC today.

---- Forwarded by Ramon Mendoza/R5/USEPA/US on 10/04/2012 08:26 AM -----

From: "Hritsuk, Eric" < Eric. Hritsuk@arcadis-us.com>

To: "Esposito, Anthony" <Anthony. Esposito@arcadis-us.com>, "'Hanshue, Sharon (DNR)"

<HanshueS@michigan.gov>, Ramon Mendoza/R5/USEPA/US@EPA,

""devantierd@michigan.gov" <devantierd@michigan.gov>, ""rathbunj@michigan.gov"

<rathbunj@michigan.gov>, "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>, "Alfano,
Judith (DEQ)" <ALFANOJ@michigan.gov>, "Griffith, Garry T." <gtgriffi@GAPAC.com>,

"Lisa_Williams@fws.gov" <Lisa_Williams@fws.gov>, "SynkP@michigan.gov" <SynkP@michigan.gov>, 'Julie Sims' <Julie.Sims@noaa.gov>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>, 'Todd Goeks' <todd.goeks@noaa.gov>, "'Steve Garbaciak'"

<sgarbaciak@anchorgea.com>, SAMUEL BORRIES/R5/USEPA/US@EPA,

Date: 10/03/2012 07:17 PM

Subject: RE: Former Plainwell Impoundment and Plainwell No. 2 Dam Area Bank Conditions

Attached, please find the agenda for tomorrow's call, draft bank repair cross-sections, and photos of Removal Areas 7, 8, and 9B of the Former Plainwell Impoundment.

Please contact me if you have any trouble with the files.

Thanks,

Eric

Eric Hritsuk | Project Civil Engineer | <u>eric.hritsuk@arcadis-us.com</u> ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606 T. 312.575.3732 | F. 312.775.9322

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Professional Engineer - IL

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restricted by law.2012 Plainwell TCRAs OMM Trustee Site Walk Oct 4 Follow Up Call Agenda_final.pdf



P1 Photolog(RA7,8,9B)_10-03-12.pdf Draft Bank Repair Figures.pdf

JAMES SARIC/R5/USEPA/US

To Jeff.Keiser

cc Frank.Dillon, Patricia.White

bcc

Subject Re: FW: Otsego Sampling

This sounds like a better method. Check with Paul and Drew to make sure they are comfortable with it as well.

Jlm

From: <Jeff.Keiser@CH2M.com>

Date: 10/03/2012 10:40PM

Cc: <Patricia.White@CH2M.com>, <Frank.Dillon@CH2M.com>

Subject: FW: Otsego Sampling

Jim, just an FYI we are resampling a couple of locations to get better penetration. This is the revised procedure I forwarded to you earlier. Once I talk to Mike I will have a better description of what is being done.

JK

Jeff Keiser

Project Manager

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www.jkeiser@ch2m.com

Solutions without Boundaries

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Sent: Wednesday, October 03, 2012 11:05 AM

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Subject: Otsego Sampling

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Please feel free to contact me if you have any questions.

Regards

Danielle

Danielle Amber, PE (MI) | Project Civil Engineer | danielle.amber@arcadis-us.com

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restricted by law.

[attachment "Coordinates of Floodplain Sample Locations to be Re-occupied.xlsx" removed by JAMES SARIC/R5/USEPA/US]

JAMES SARIC/R5/USEPA/US To bblaine

cc "Bucholtz, Paul (DEQ)", Leslie Kirby-Miles

10/09/2012 02:02 PM

bcc

Subject Allegan County Board of Commissioners Letter to MDEQ and

US EPA 9/27/12

Becky,

I wanted to make you aware that I received an electronic copy of your letter from Paul Bucholtz of the Michigan Department of Environmental Quality on 10/3/12. The letter that was sent to me from Mark DeYoung had the incorrect address. My address is indicated at the bottom of this email for any future correspondence.

US EPA will be submitting a written response to your letter, and will not be attending the Board meeting on 10/25/12.

If you have any questions, please feel free to contact me at (312) 886-0992.

thanks Jim Saric U.S. EPA Region V Remedial Project Manager 77 W. Jackson (S-6J) Chicago, IL 60605

Nicole Wood/R5/USEPA/US

To Michael Berkoff

10/10/2012 10:18 AM

cc bcc

Subject Fw: LePetomane XXIII, Kalamazoo Site : Compensation and

Expense Report L12-003

Let me know what you think Nicole Wood-Chi Associate Regional Counsel U.S. EPA Region 5 77 W. Jackson Blvd. C-14J Chicago, IL 60604 312-886-0664

-----Forwarded by Nicole Wood/R5/USEPA/US on 10/10/2012 10:17AM -----

To: Nicole Wood/R5/USEPA/US@EPA

From: Andrew Steinberg <andrew.steinberg@lepetomaneinc.com>

Date: 10/10/2012 09:24AM

Subject: LePetomane XXIII, Kalamazoo Site: Compensation and Expense Report L12-003

Nicole -

Linked to this email, please find for your review the detailed time and expense records for the administrative and environmental expenses incurred by the Lyondell Environmental Custodial Trust (the "Trust") for the period June 1, 2011 through July 31, 2011.

The requested payments total the sum of \$92,678.04 with a site-specific component of \$83,211.86. Please see the linked PDFs for payment details, a summary of the various fees and expenses incurred during the period, and budget tracking tables for site-specific administrative and environmental services.

To obtain the Compensation and Expense Report packages including all invoice back-up: https://lepetomaneinc.sharefile.com/d/s70db248858545e29

Thank you,

Andrew W. Steinberg

Vice President, Operations | LE PETOMANE, INC Direct 312.498.2800 | Fax 312.276.4939 35 E Wacker Dr, Suite 1550, Chicago IL 60601 andrew.steinberg@lepetomaneinc.com

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

cc JAMES SARIC

To "Jeff.Keiser@CH2M.com"

>

10/11/2012 03:27 PM

bcc

Subject QEA model effort

Jeff,

Did QEA ever send some kind of final summary report or document for the model effort that was being conducted in 2004? I think the modeling activities didn't even extend into 2005. In any case, I cannot locate a summary of activities in my file and was hoping to get a copy from you.

Thanks

Paul Bucholtz MDEQ-RD Superfund Section 517-373-8174

Craig Thomas/R5/USEPA/US@EPA

10/12/2012 05:06 PM

To Craig Thomas, Paul Ruesch, SAMUEL BORRIES, KEITH LESNIAK, Don Deblasio, Megan McSeveney, Jason El-Zein, JOHN MARITOTE, Mike Ribordy, JAMES SARIC, REBECCA FREY, Michael Berkoff, Leslie Kirby-Miles, Nicole Wood, THOMAS MARKS, Sherry Fielding, John Glover, Carol Ropski, millsm, devantierd, vanotterenb, walczakj, bucholtzp, ebowman, jrhinefield, mbrowning, christopher.lantinga, merchantb, jungd, polegam, lisa_williams, Goeks.Todd, valincia_darby, Mark Johnson

cc bcc

Subject Pollution Report #20 Portage Creek Area - Progress

Attached is a Pollution Report (POLREP) regarding:

USEPA Region V Portage Creek Area Stockbridge Ave to Kalamazoo River, Kalamazoo, MI

To view this POLREP, please open the attachment. Lotus Notes Users, please Launch the attachment.

For additional information regarding this site, please visit the website by clicking on this link: http://www.epaosc.org/portagecreekarea





portagecreekarea_polrep_20.htm portagecreekarea_polrep_20_IMG_4167 2.JPG





portagecreekarea_polrep_20_Kalamazoo_City-20121012-00122.jpg portagecreekarea_polrep_20_IMG_4108.JPG

Ramon Mendoza/R5/USEPA/US

10/15/2012 04:13 PM

To "Erickson, Michael", "Griffith, Garry T."

cc "Bucholtz, Paul (DEQ)", SAMUEL BORRIES, Mike Ribordy, Leslie Kirby-Miles, JAMES SARIC, "Hanshue, Sharon (DNR)", "Alfano, Judith (DEQ)"

bcc

Subject Re: USEPA Comments Draft Spring 2012 Bank Conditions Monitoring Report for the Former Plainwell Impoundment and Plainwell No. 2 Dam Area

Mr. Erickson,

Attached please find our comments on the subject report. Should you have any questions, please contact me at 312-886-4314 or cell at 312-802-1409.

Sincerely,

Ramon C. Mendoza, OSC USEPA Region 5 SE-5J 77 West Jackson Chicago, Illinois, 60604

EPA.2012 Bank Monitoring Report comment.pdf

<Jeff.Keiser@CH2M.com>

To JAMES SARIC

10/17/2012 08:23 PM

cc bcc

Subject Field sampling progress.

Jim

The following bank sample cores were processed today. Field sampling is done for the week. Processing to go through tomorrow. Looks like field sampling will be completed next week if things go smoothly.

OTBN-01

OTBS-01

OTBN-02

OTBS-02

OTBN-04

OTBS-04

OTBN-05

OTBS-05

OTBS-07

OTBN-08

OTBN-09

OTBS-09

OTBN-11

OTBS-11

OTBS-16

OTBS-17

Jeff Keiser
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Ramon Mendoza/R5/USEPA/US

10/18/2012 04:07 PM

To Paul Bucholtz, "Sharon Hanshue ", "Mark Mills", Lisa Williams, "Julie Sims", "Todd Goeks "

CC SAMUEL BORRIES, Mike Ribordy

bcc

Subject Fw: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo

Hello Paul et al: I have completed an initial review of the repair memo and noted that they will need to restore vegetated areas that are disturbed by the repair the Former PLainwell Impoundment Western Channel (no statement was provided to this effect).

Re: RA 10a: PCB contaminated waste remains exposed at RA 10a. I will be the working at the Portage Creek EPA Site next week Oct 23-24 and am available to meet at RA 10A on Oct 25 at 9am EST to mark the areas which need to be armored with rock. i Would like to invite DEQ, DNR, and other Trustees so We could collectively mark the Areas with GP and its contractors.

RSVP, Ramon Mendoza, OSC USEPA Region 9 312-886-4314

---- Forwarded by Ramon Mendoza/R5/USEPA/US on 10/18/2012 03:47 PM -----

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: SAMUEL BORRIES/R5/USEPA/US@EPA, Paul Bucholtz <buckletched by Samuel Borries (Samuel Borries), "Sharon Samuel Borries (Samuel Borries), "Samuel Borries (Sa

Hanshue " <hanshues@michigan.gov>, "Mark Mills" <millsm@michigan.gov>, Lisa Williams

<Lisa_Williams@fws.gov>, "Julie Sims" <SIMSJ@michigan.gov>, "Todd Goeks "

<Todd.Goeks@noaa.gov>, "Garry T. Griffith" <gtgriffi@GAPAC.com>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

Date: 10/15/2012 04:17 PM

Subject: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo

Dear Mr. Mendoza,

On behalf of Mike Erickson, please find attached a Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo .

Should you have any questions, please contact Mike at your convenience.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

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D: 810.225.1981 | O: 810.229.8594

www.arcadis-us.com Sediment Assessment, Management & Remediation

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restricted by law. Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo.pdf

<Lisa_Williams@fws.gov>

10/19/2012 08:57 AM

To Ramon Mendoza

cc SAMUEL BORRIES, Paul Bucholtz, "Sharon Hanshue ", Mark Mills, Mike Ribordy, Julie Sims, "Todd Goeks "

bcc

Subject Re: Fw: Former Plainwell Impoundment and Plainwell No 2
Dam Area Proposed Repair Memo

Ramon,

Thank you so much for your offer to meet in the field, and hopefully one of us can make it out. My apologies, but I will be on leave all next week and unable to make it.

-Lisa

Lisa L. Williams, Ph.D.
U.S. Fish and Wildlife Service
Acting Field Supervisor, Oct. 15-19
Ohio Field Office
U S Fish and Wildlife Service
4625 Morse Road, Suite 104
Columbus, Ohio 43230
614-416-8993 (no voice mail access)
614-416-8994 (FAX)
lisa_williams@fws.gov
Mendoza.Ramon@epamail.epa.gov

Mendoza.Ram on@epamail.e pa.gov

10/18/2012 05:07 PM ToPaul Bucholtz

sucholtzp@michigan.gov>, "Sharon Hanshue " <hanshues@michigan.gov>, "Mark Mills" <millsm@michigan.gov>, Lisa Williams <Lisa_Williams@fws.gov>, "Julie Sims" <SIMSJ@michigan.gov>, "Todd Goeks " <Todd.Goeks@noaa.gov>

ccBorries.Samuel@epamail.epa.gov, Ribordy.Mike@epamail.epa.gov

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RSVP. Ramon Mendoza, OSC **USEPA** Region 9 312-886-4314

----- Forwarded by Ramon Mendoza/R5/USEPA/US on 10/18/2012 03:47 PM -----

From: "Shreve, Barb" < Barb. Shreve@arcadis-us.com>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: SAMUEL BORRIES/R5/USEPA/US@EPA, Paul Bucholtz <bucholtzp@michigan.gov>, "Sharon Hanshue " <hanshues@michigan.gov>, "Mark Mills" <millsm@michigan.gov>, Lisa Williams

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<Todd.Goeks@noaa.gov>, "Garry T. Griffith" <gtgriffi@GAPAC.com>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

Date: 10/15/2012 04:17 PM

Subject: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo

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Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

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Williams/R3/FWS/DOI] pic16118.gif

10/23/2012 10:27 AM

Ramon To JAMES SARIC

Mendoza/R5/USEPA/US cc SAMUEL BORRIES, Mike Ribordy

bcc

Subject Fw: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo

hi Jim, Got your email regarding MDEQ. FYI, attached is the work that is proposed this fall. I will insist that we put in Rock at 10a the pipeline crossing since it was never excavated and there is waste exposed at the waterline. GP is not agreeable to putting in rock at 7b, 8b, and 9b.

I have scheduled a field inspection Oct. 25 at 0900 EST with all parties at 10a to mark the area to be rocked. So far only one person from DRN (Mills) will be coming.

Ramon

---- Forwarded by Ramon Mendoza/R5/USEPA/US on 10/23/2012 10:23 AM ----

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: SAMUEL BORRIES/R5/USEPA/US@EPA, Paul Bucholtz <buckletched by Samuel Borries (Samuel Borries), "Sharon" (Samuel Borries), "Sharon" (Samuel Borries), "Sharon" (Samuel Borries), "Sharon" (Samuel Borries), "Samuel Borries), "Sharon" (Samuel Borries), "Samuel Borries), "Sharon" (Samuel Borries), "Samuel Borries), "Sharon" (Samuel Borries), "Samuel Borries), "Sa

Hanshue " <hanshues@michigan.gov>, "Mark Mills" <millsm@michigan.gov>, Lisa Williams

<Lisa_Williams@fws.gov>, "Julie Sims" <SIMSJ@michigan.gov>, "Todd Goeks "

<Todd.Goeks@noaa.gov>, "Garry T. Griffith" <qtgriffi@GAPAC.com>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

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Barb Shreve | Assistant | <u>barb.shreve@arcadis-us.com</u>

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restricted by law. Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo.pdf

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

10/25/2012 10:07 AM

To JAMES SARIC, Paul Bucholtz, Lisa Williams, "Sharon Hanshue", "Todd Goeks", "Jeff Keiser"

cc "Garry T. Griffith", "Erickson, Michael"

bcc

Subject Proposed transmittal plans for Area 1 Feasibility Study & Area 2 Supplemental Remedial Investigation

Dear Jim, Paul, Lisa, Sharon, Todd and Jeff,

On behalf of Mike Erickson please find information below regarding the proposed transmittal plans for upcoming reports.

As you know, we are scheduled to submit the Area 1 Feasibility Study (FS) and Area 2 Supplemental Remedial Investigation (SRI) reports next week (the FS is due on October 30 and the SRI is due on November 1). In preparation for these submittals, we have summarized the proposed transmittal plans for each report below:

<u>Area 1 FS Report</u>: We will make an initial transmittal by email on October 30, directing recipients to an ftp site, where the full FS, including Appendices, will be posted. Additional hard and electronic copies will be forwarded the following day per the list below:

Recipien t	Number of hard copies, including appendices (plus CD of full report)	Number of electronic-only copies
Jim Saric (USEPA)	2	2
Paul Bucholtz (MDEQ)	2	1
Lisa Williams (USFWS)	-	1
Sharon Hanshue (MDNR)	-	1
Todd Goeks (NOAA)	-	1
Jeff		

Keiser	1	
(CH2M	1	-
HILL)		

<u>Area 2 SRI Report</u>: We will make an initial transmittal by email on November 1, directing recipients to an ftp site, where the full SRI, including Appendices, will be posted. Additional hard and electronic copies will be forwarded the following day per the list below:

Recipien t	Number of hard copies, with selected appendice s (plus CD of full report)	Number of electronic-only copies
Jim Saric (USEPA)	2	2
Paul Bucholtz (MDEQ)	2	1
Lisa Williams (USFWS)	-	1
Sharon Hanshue (MDNR)	-	1
Todd Goeks (NOAA)	-	1
Jeff Keiser (CH2M HILL)	1	-

We trust that this transmittal plan is acceptable to you and ask that you contact us as soon as possible if additional recipients or number of report copies are identified.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

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10/26/2012 02:59 PM

Ramon To JAMES SARIC, SAMUEL BORRIES

Mendoza/R5/USEPA/US cc Mike Ribordy

bcc

Subject Plainwell Impoundment: Last minute find by MDEQ

Additional Eroded Area around 4A

Hello Jim and Sam: FYI, Am forwarding a field report from Paul Bucholz inspection results of the subject site, which he conducted after I left yesterday morning. He found an stretch of shoreline on a previously excavated area in removal area 4A. We did not see this during the August 30 inspection (on of the limitations of doing it by foot).

Anyways, needless to say I anticipate GP will complain about the lateness of this report. However, as you will see the waste is along the shoreline in danger or being mobilized by the river . I will push to get this area armored under the AOC this upcoming NOvember if possible...

Thanks, Ramon Mendoza 6-4314

---- Forwarded by Ramon Mendoza/R5/USEPA/US on 10/26/2012 02:52 PM -----

Ramon Mendoza/R5/USEPA/US From:

"Griffith, Garry T." < gtgriffi@GAPAC.com>, To:

10/26/2012 02:04 PM Date:

Subject: RE: Additional Area around 4A

Hello Gary, Per our call I am sending you the MDEQ report from the inspection they conducted in the subject removal Area. The inspection was conducted yesterday after I had left the Plainwell impoundment Site.

Its pretty significant to the extent that the waste exposed on the shoreline similar to 10A. Some armoring with rock in this area should arrest the erosion. This area may not be easily accessible by foot...

I was not aware of this issue until today.

To ensure we dont miss anything in the future I suggest that we do an inspection of the entire Plainwell shoreline with the State from boats.

I understand you may not be able to get to this until next week. Please call me as soon as you can.



Sincerely,

Ramon Mendoza, OSC **USEPA Region 5** 312-802-1409 cell 312-886-4314 (Office)

From: "Griffith, Garry T." <gtgriffi@GAPAC.com>
To: Ramon Mendoza/R5/USEPA/US@EPA,

Date: 10/24/2012 07:35 AM

Subject: RE: EPA Expectations for 10A

I'll give you a call after lunch. Thanks

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Wednesday, October 24, 2012 8:27 AM

To: Griffith, Garry T.

Subject: RE: EPA Expectations for 10A

Anytime between 2-4pm is good. RSVP, Ramon

"Griffith, Garry T." ---10/23/2012 08:18:59 PM---Do you have some time tomorrow PM that we can talk ahead of the Thursday meeting? From: Mendoza.Ramo

From: "Griffith, Garry T." <gtgriffi@GAPAC.com>
To: Ramon Mendoza/R5/USEPA/US@EPA,

Date: 10/23/2012 08:18 PM

Subject: RE: EPA Expectations for 10A

Do you have some time tomorrow PM that we can talk ahead of the Thursday meeting?

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Tuesday, October 23, 2012 3:45 PM

To: Griffith, Garry T. **Cc:** Bucholtz, Paul (DEQ)

Subject: Re: EPA Expectations for 10A

Hello Gary, We look forward to our meeting at 10A Thursday at 9am EST. For clarification, we expect GP to use its technical resources and expertise to the propose area of the shoreline in 10A which will need to be armored with rock to prevent PCB contaminated waste from being released into the river. We can also use the visit to point out the small areas in 10B where the geotextile appears to have been exposed and where rock will need to be replaced.

Sincerely, Ramon Mendoza, OSC USEPA Region 5 312-802-1409

"Bucholtz, Paul (DEQ)" ---10/23/2012 02:08:32 PM---Ramon, Just for clarity sake. Are you planning on a 9 a.m. EST start time or an 8 a.m. EST start ti

From: "Bucholtz, Paul (DEQ)" < BUCHOLTZP@michigan.gov >

To: Ramon Mendoza/R5/USEPA/US@EPA, "Griffith, Garry T." < qtgriffi@GAPAC.com>,

Date: 10/23/2012 02:08 PM

Ramon,

Just for clarity sake. Are you planning on a 9 a.m. EST start time or an 8 a.m. EST start time for Thursday 10/25?

Garry and I talked and had conflicting information. Please advise.

John Kern <jkern@kernstat.com> 10/30/2012 09:32 AM To "King, Todd W.", Paul Bucholtz, "Frank.Dillon@CH2M.com", JAMES SARIC

CC

bcc

Subject Lets talk BAFs today if you have time

Guys,

Following is a summary of my big picture comments as Frank and I discussed this morning. Frank if you see that I deviated from our discussion make changes and send around.

The attached zp file has more detailed commentary providing supporting arguments for 1-5 below. The bottom line is that the data are too week to justify making up our own methods for this project. The simple, well established and widely used Burkhart approach (in the zip file) should be adopted throughout. The flip-flopping between methods, and efforts to justify them with incorrect technical arguments is leading to a mess that cannot be justified and will not be suitable moving forward. Now is the time to clean up and simplify for the remainder of the project.

"If you have to choose between a neat explanation, making few assumptions, or a messy one relying on stacks of them, go for elegant simplicity every time"--This is the basis for Ocham's Razor, (William of Ocham 1288-1348). We should follow the same principle.

My overall comments:

- 1) Use the same methods for all BAFs, no justification for flipping and flopping between means and medians
 - 1.1) Burkhart paper supplies the EPA approved method--just use it.
 - 1.2) The technical arguments are just hand waving -- no merit.
- 2) <u>eggs should not be averaged per location</u> because this biases the estimates of the variance needed for estimating confidence intervals
- 2.1) to avoid over-representation of a single box <u>use a weighted average to estimate the mean and variance</u> -- with individual eggs. I could supply equations if needed.
- 3) Nest box 114 can be included, but the soil PCB concentrations need to be divided by 2, to reflect the fact that the birds home ranges are only about 50% in the floodplain.
- 4) The one loophole that exists for them is that the ECO-SSL guidance broke ranks with Burkhart and used the median of the individual ratios, so if they insist on medians, this would be the only situation. The numerators and denominators need to be individual measurements or arithmetic averages of measurements per -Burkhart. They would also need to take this approach throughout and then they will need to bootstrap to calculate confidence limits

5) The use of confidence limits for the BAF ratios are appropriate for uncertainty evaluation. The sample sizes are way too small to estimate percentiles.

--

John W. Kern, PhD Kern Statistical Services, Inc. 5175 NE River Rd. Sauk Rapids, MN 56379

T: 320.281.0676 C: 509.432.6400

******************* ATTACHMENT NOT DELIVERED **************

This Email message contained an attachment named UCLsEPASupGuidance 9285.7-081.zip which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

JAMES SARIC/R5/USEPA/US To Jeff.Keiser

cc

10/30/2012 09:52 AM

Subject Fw: Lets talk BAFs today if you have time

----- Forwarded by JAMES SARIC/R5/USEPA/US on 10/30/2012 09:52 AM -----

From: John Kern < jkern@kernstat.com>

To: "King, Todd W." <KingTW@cdmsmith.com>, Paul Bucholtz <bucholtzp@michigan.gov>,

"Frank.Dillon@CH2M.com" <Frank.Dillon@CH2M.com>, JAMES SARIC/R5/USEPA/US@EPA,

Date: 10/30/2012 09:32 AM

Subject: Lets talk BAFs today if you have time

Guys,

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--

John W. Kern, PhD Kern Statistical Services, Inc.

5175 NE River Rd.

Sauk Rapids, MN 56379

T: 320.281.0676 C: 509.432.6400

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For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

"VanDewalker, Heather" <Heather.VanDewalker@arca dis-us.com>

10/30/2012 07:35 PM

To JAMES SARIC

cc Paul Bucholtz, Lisa Williams, "Sharon Hanshue ", "Todd Goeks ", "Jeff Keiser ", "Garry T. Griffith", "Mark P. Brown", "Kathy Huibregtse ", "Erickson, Michael", "frank.dillon@ch2m.com", "patricia.white@ch2m.com", "richard.gay@weyerhaeuser.com", "martin.lebo@weyerhaeuser.com"

bcc

Subject Area 1 Feasibility Study for Federal and State Review

Dear Mr. Saric,

On behalf of Mike Erickson, this email transmits the Area 1 Feasibility Study for Federal and State Review. This document has been posted on an ftp site and is accessible using the following instructions. Note that the document is loaded as a single complete pdf.

Website address: http://secureftp.arcadis-us.com/thinclient

Username: Area_1_FS Password: Feasibility

Once you have accessed the site, check the box to the left of the document name and then click on the "Download files" button. <u>Please note that you will need to use Internet Explorer to access the site</u>.

Hard copies in paper and electronic copies on CD are being sent out tomorrow by overnight courier to the distribution list indicated on the cover letter .

Please contact Mike Erickson with any questions you may have concerning the FS.

Sincerely,

Heather VanDewalker on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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"VanDewalker, Heather" <Heather.VanDewalker@arca dis-us.com>

10/31/2012 08:04 AM

To JAMES SARIC cc "Erickson, Michael"

bcc

Subject RE: Area 1 Feasibility Study for Federal and State Review

Jim-

We'll get the requested number of copies in the mail today.

thanks Heather

From: Saric.James@epamail.epa.gov [mailto:Saric.James@epamail.epa.gov]

Sent: Wednesday, October 31, 2012 8:59 AM

To: VanDewalker, Heather

Subject: Area 1 Feasibility Study for Federal and State Review

Heather:

I would like 2 hard copies delivered to U.S. EPA and 5 DVDs of the report.

thanks Jim Saric

-----"VanDewalker, Heather" < Heather. VanDewalker@arcadis-us.com > wrote: -----

To: JAMES SARIC/R5/USEPA/US@EPA

From: "VanDewalker, Heather" < Heather. VanDewalker@arcadis-us.com>

Date: 10/30/2012 07:35PM

Cc: Paul Bucholtz < bucholtzp@michigan.gov >, Lisa Williams < Lisa Williams@fws.gov >, "Sharon Hanshue " < hanshues@michigan.gov >, "Todd Goeks " < Todd.Goeks@noaa.gov >, "Jeff Keiser " < Jeff.Keiser@CH2M.com >, "Garry T. Griffith" < gtgriffi@GAPAC.com >, "Mark P. Brown" < mpbrown@waterviewsllc.com >, "Kathy Huibregtse " < khuibregtse@environcorp.com >, "Erickson, Michael " < Michael.Erickson@arcadis-us.com >, "frank.dillon@ch2m.com >, "patricia.white@ch2m.com " < patricia.white@ch2m.com >, "richard.gay@weyerhaeuser.com " < richard.gay@weyerhaeuser.com " <

martin.lebo@weyerhaeuser.com>

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Sincerely,

Heather VanDewalker on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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JAMES SARIC/R5/USEPA/US

10/31/2012 08:57 AM

To "Erickson, Michael"

cc "frank.dillon@ch2m.com", "Jeff Keiser ", Paul Bucholtz, "Garry T. Griffith", John Kern, "Anthony, Bonner"

bcc

Subject EPA Response to BAF proposal

Mike:

In late July EPA/MDEQ submitted some comments regarding the eco risk assessment for Area 2. Bonner submitted a draft proposal/responses regarding some BAF issues to be applied to the Eco Risk Assessment for Area 2 in late September. We have reviewed these and consulted with MDEQ.

Here's our position on these issues. When we review the Area 2 RI report we will be incorporating these issues in comments where applicable.

If you have any questions, we can discuss this further.

thanks Jim

EPA's Response to Bonner's Proposal

- 1. It is EPA preference to follow the guidance of Burkhart (2006) and use the mean as the measure of central tendency for BAF calculations. This is consistent with current guidance and will most likely be highlighted by EPA's remedy review board.
 - Burkhart, L. 2006. Estimation of Biota Sediment Accumulation Factor (BSAF) from Paired Observations of Chemical Concentrations in Biota and Sediment. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Mid-Continent Ecology Division. Duluth, MN. EPA/600/R-06/047
- 2. Eggs should not be averaged per location because this biases the estimates of the variance needed for estimating confidence intervals. To avoid over-representation of a single box use a weighted average to estimate the mean and variance -- with individual eggs.
- 3. Nest box 114 can be included, but the soil PCB concentrations need to be divided by 2, to reflect the fact that the birds home ranges are only about 50% in the floodplain.
- 4. The use of confidence limits for the BAF ratios is appropriate for uncertainty evaluation. The sample sizes are too small to estimate percentiles. Confidence intervals should be used in all cases.

Craig Thomas/R5/USEPA/US@EPA

10/31/2012 03:14 PM

To Craig Thomas, Paul Ruesch, SAMUEL BORRIES, KEITH LESNIAK, Don Deblasio, Megan McSeveney, Jason El-Zein, JOHN MARITOTE, Mike Ribordy, JAMES SARIC, REBECCA FREY, Michael Berkoff, Leslie Kirby-Miles, Nicole Wood, THOMAS MARKS, Sherry Fielding, John Glover, Carol Ropski, millsm, devantierd, vanotterenb, walczakj, bucholtzp, ebowman, jrhinefield, mbrowning, christopher.lantinga, merchantb, jungd, polegam, lisa_williams, Goeks.Todd, valincia_darby, Mark Johnson

СС

bcc

Subject Pollution Report #21 Portage Creek Area - Progress

Attached is a Pollution Report (POLREP) regarding:

USEPA Region V Portage Creek Area Stockbridge Ave to Kalamazoo River, Kalamazoo, MI

To view this POLREP, please open the attachment. Lotus Notes Users, please Launch the attachment.

For additional information regarding this site, please visit the website by clicking on this link: http://epaosc.org/portagecreekarea





portagecreekarea_polrep_21.htm portagecreekarea_polrep_21_IMG_4227.JPG





portagecreekarea_polrep_21_IMG_4222.JPG portagecreekarea_polrep_21_IMG_4212.JPG

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

11/01/2012 02:34 PM

To JAMES SARIC

cc Paul Bucholtz, "Garry T. Griffith", "Erickson, Michael"

bcc

Subject 2012 Fish Sampling in the Kalamazoo River from Morrow

Lake to Lake Allegan

Dear Mr. Saric,

On behalf of Mike Erickson, please find attached a letter regarding 2012 Fish Sampling in the Kalamazoo River from Morrow Lake to Lake Allegan .

Please review at your convenience and contact Mike with any questions. A hard copy of this letter is being sent by FedEx for delivery tomorrow.

Respectfully, Barb

Barb Shreve | Assistant to Mr. Erickson | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

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restricted by law. 2012 Kalamazoo River Fish Sampling Letter_110112.pdf

"Tomlinson , Lisa" <Lisa.Tomlinson @arcadis-us. com>

11/01/2012 03:35 PM

To JAMES SARIC

cc "BUCHOLTZP@michigan.gov", "Jeff.Keiser@CH2M.com", Lisa Williams, "Sharon Hanshue ", "Todd Goeks (Todd.Goeks@noaa.gov)", "Griffith, Garry T.", ""mpbrown@waterviewsllc.com", "Martin Lebo (martin.lebo@weyerhaeuser.com)", "Richard Gay (richard.gay@weyerhaeuser.com)", "Kathy Huibregtse ", "Erickson, Michael"

bcc

Subject Draft Area 2 SRI Report for federal and state review

Dear Mr. Saric,

On behalf of Mike Erickson, this email transmits the Draft Area 2 Supplemental Remedial Investigation Report for federal and state review.

The Draft Area 2 SRI Report has been posted on an FTP site, and can be accessed using the instructions below. Please note that, due to file sizes, the document has been uploaded as multiple PDF files. The main text, tables, and figures are available as a single PDF, and each of the individual appendices are also available as a PDF file.

--

Website address: http://secureftp.arcadis-us.com/thinclient

Username: Area2SRI_Draft_Nov2012 (the site will automatically add on @secureftp.arcadis-us.com -

this is necessary)

Password: Area2SRI_Draft_Nov2012

--

Once you have accessed the FTP site, check the box to the left of the document name and then click on the "Download files" button. Please note that you will need to use Internet Explorer to access the site.

Hard and electronic copies of the report are being sent out tomorrow via overnight courier to the distribution list indicated on the cover letter.

Please contact Mike Erickson with any questions you may have concerning the Draft Area 2 SRI Report.

Regards,

Lisa Tomlinson, on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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<Jeff.Keiser@CH2M.com>

11/09/2012 08:35 AM

To JAMES SARIC

5.55 AIVI

cc bcc

Subject RE: QEA

Yes, MDEQ used them for the review as you described.

I used them when Shari was PM for developing a CSM. We started out having them develop a full Fate, transport and bio uptake model at Milt's requests. Once we got to the CSM, the project went into negotiations.

I will forward the power point they developed for the CSM.

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
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Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

From: Saric.James@epamail.epa.gov [mailto:Saric.James@epamail.epa.gov]

Sent: Friday, November 09, 2012 8:31 AM

To: Keiser, Jeff/MKE Subject: QEA

Jeff.

Do you know if EPA and/or CH@MHILL has used QEA for any modeling work on the Kalamazoo River? I have a hard copy of a review of a Kalamazoo River PCB fate model developed by Limno-Tech, Inc. that was reviewed by QEA as pare of a MDEQ contract in June 2001. Otherwise, I don't have anything. Do you recall anything else?

Jim

<Jeff.Keiser@CH2M.com>

11/09/2012 08:56 AM

To JAMES SARIC

cc Patricia. White, Frank. Dillon

bcc

Subject QEA CSM

Jim,

In 2005 CH2M HILL contracted with QEA to develop a CSM for the River. EPA had requested we develop a full Fate/Transport and Biological Uptake model for the River, similar to that developed for the Fox. Because the Agencies and Stakeholders all had different views of what was going on with the river, we started with a phased approach, beginning with the development of the CSM and how the River could be modeled. The CSM power point was the result of the initial effort. The Phase I summary includes QEA's outline of existing data and data gaps for moving on to Phase II.

At this point in the project, the Agencies went into negotiations with the PRPs and no further work was done.

I do have additional background information that went into the CSM. Mostly in power point form.

Call me with questions.

JK

Jeff Keiser
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Added GW Slides.pdf Kzoo_CSM_MODELGROUP_050627.ppt Kzoo_PHASE 1 summary_050627.ppt

<Jeff.Keiser@CH2M.com>

11/09/2012 03:54 PM

To JAMES SARIC

cc Patricia. White, Frank. Dillon, William. Andrae

bcc

Subject Kalamazoo River Area 1 FS, Area 2 SRI Review

Jim, attached is a draft schedule for review of the Area 1 FS and Area 2 SRI. I scheduled the FS first because of the need to get the ROD signed this year. I staggered the initial review and submittal of comments about 2 weeks to avoid the holidays.

I would expect MDEQ to require 60 days for initial review of the FS and I have 75 for the SRI. That adds about 40 days to each schedule if we are going to incorporate some of MDEQ 's comments into EPA's.

Let me know what you think, this is doable but pretty aggressive based on previous experience with everyone involved.

JK

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Area1FS_Area2SRI.mpp Microsoft Office Project - Area1FS_Area2SRI.pdf

JAMES SARIC/R5/USEPA/US To "Shreve, Barb"

cc Paul Bucholtz, "Garry T. Griffith", "Erickson, Michael"

11/14/2012 10:16 AM

bcc

Subject Re: 2012 Fish Sampling in the Kalamazoo River from Morrow

Lake to Lake Allegan

Why are there no carp being sampled?

"Shreve, Barb" Dear Mr. Saric, On behalf of Mike Erick... 11/01/2012 02:34:39 PM

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: Paul Bucholtz <bucholtzp@michigan.gov>, "Garry T. Griffith" <gtgriffi@GAPAC.com>, "Erickson,

Michael" < Michael. Erickson@arcadis-us.com>

Date: 11/01/2012 02:34 PM

Subject: 2012 Fish Sampling in the Kalamazoo River from Morrow Lake to Lake Allegan

Dear Mr. Saric,

On behalf of Mike Erickson, please find attached a letter regarding 2012 Fish Sampling in the Kalamazoo River from Morrow Lake to Lake Allegan .

Please review at your convenience and contact Mike with any questions. A hard copy of this letter is being sent by FedEx for delivery tomorrow.

Respectfully, Barb

Barb Shreve | Assistant to Mr. Erickson | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. I 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

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<Jeff.Keiser@CH2M.com>

11/14/2012 10:49 AM

To JAMES SARIC

cc Patricia. White, Frank. Dillon, William. Andrae

bcc

Subject Kazoo River Bank Repair

Jim, I pulled the following from the monthly status report. Can you share these? I would like to make sure we incorporated any lessons learned or long term requirements into the FS. It may help us craft additional language on bank stability.

On October 8, ARCADIS transmitted to the Trustees figures detailing bank repair for the Former Plainwell Impoundment and Plainwell No. 2 Dam Area.

On October 15, ARCADIS forwarded to USEPA the fall 2012 bank repair plan for the Former Plainwell Impoundment and Plainwell No. 2 Dam Area.

On October 15, USEPA transmitted to ARCADIS comments on the draft *Former Plainwell Impoundment* and

Plainwell No. 2 Dam Area Spring 2012 Bank Conditions Monitoring Report .

Thanks JK

Jeff Keiser
Project Manager
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Milwaukee, WI 53214
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e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries

JAMES SARIC/R5/USEPA/US

To Jeff.Keiser

11/14/2012 11:01 AM

cc Frank.Dillon, Patricia.White, William.Andrae

bcc

Subject Re: Kazoo River Bank Repair

Jeff, Frank and Patty,

These attachments clarify the latest on the Plainwell and Plainwell 2 impoundments additional work. Some minor work in one area of Plainwell 2, but more significant work to be completed to stabilize the banks in Plainwell, particularly the States concerns with areas 4a, and 7b, 8b,9b, which they believe should all be rocked.

Jim



11.14.12 synk to mendoza.pdf



MDEQ.BankMOnitoringComments10.26.2012.pdf



Area4A.pdf





EPA.2012 Bank Monitoring Report comment.pdf

Jim, I pulled the following from the mon...

11/14/2012 10:49:57 AM

From: <Jeff.Keiser@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: <Patricia.White@CH2M.com>, <Frank.Dillon@CH2M.com>, <William.Andrae@CH2M.com>

Date: 11/14/2012 10:49 AM Subject: Kazoo River Bank Repair

Jim, I pulled the following from the monthly status report. Can you share these? I would like to make sure we incorporated any lessons learned or long term requirements into the FS. It may help us craft additional language on bank stability.

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Thanks JK

Jeff Keiser Project Manager 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct – 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com Solutions without Boundaries

JAMES SARIC/R5/USEPA/US To Jeff.Keiser

CC

11/15/2012 11:56 AM

bcc

Subject Re: Kazoo R. Area 1 FS, Area 2 SRI Schedule

Jeff,

This looks better. A few things.

For the FS

Item 6 should occur the same week as item 5, as I don't see any work getting conducted the week of 12/24.

Also, I think you should reorder the items on the list. Shouldn't they be 4, 7, 8, 5, 6?

For the RI

I agree that item 21 should be a face-to-face (as long as MDEQ will be prepared to discuss their comments then)

Please revise.

Jim

Jim I incorporated your revisions. Note,... 11/15/2012 10:01:00 AM

From: <Jeff.Keiser@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Date: 11/15/2012 10:01 AM

Subject: Kazoo R. Area 1 FS, Area 2 SRI Schedule

Jim

I incorporated your revisions. Note, as a result of the revisions we had a little extra time so I modified things to start on Mondays and end on Fridays. There is a week towards the end of the Area 2 SRI that has nothing scheduled. That gives us a little float.

Let me know what you think. I added which meetings are in person and which are by phone in the description. Right now we do not have an in person meeting on the Area 2 SRI. I think we might want to consider that maybe task 21?

Call or e-mail me with questions.

JK

Jeff Keiser Project Manager 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct – 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com

Solutions without Boundaries [attachment "Microsoft Office Project - Area1FS_Area2SRI_11-14-2012rev.pdf" deleted by JAMES SARIC/R5/USEPA/US]

Ramon Mendoza/R5/USEPA/US

11/20/2012 11:49 AM

To "Shreve, Barb"

cc Judith Alfano, Paul Bucholtz, "Garry T. Griffith", "Sharon Hanshue ", "Jessica Winter ", Julie Sims, Lisa Williams, "Erickson, Michael", Mark Mills, SAMUEL BORRIES, "Todd

Goeks " bcc Mike Ribordy

Subject Re: Former Plainwell Impoundment and Plainwell No 2 Dam

Area Proposed Repair Memo - Revised November 2012

Ms. Shreve, Attached, Please find our response to the subject document. A hard copy is being mailed today. Should you have any questions, please contact me at 312-886-4314.



EPAComment.PlainWell.Dam2.RepairMemo11.2012.pdf

Sincerely, Ramon Mendoza, On-Scene Coordinator **USEPA Region 5**

"Shreve, Barb" Dear Mr. Mendoza, On behalf of Mike... 11/15/2012 03:15:53 PM

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Judith Alfano <alfanoj@michigan.gov>, SAMUEL BORRIES/R5/USEPA/US@EPA, Paul Bucholtz Cc:

<bucholtzp@michigan.gov>, "Todd Goeks " <Todd.Goeks@noaa.gov>, "Garry T. Griffith"
<gtgriffi@GAPAC.com>, "Sharon Hanshue " <hanshues@michigan.gov>, Mark Mills

<millsm@michigan.gov>, Julie Sims <julie.sims@noaa.gov>, Lisa Williams

<Lisa_Williams@fws.gov>, "Jessica Winter " <jessica.winter@noaa.gov>, "Erickson, Michael"

<Michael.Erickson@arcadis-us.com>

Date: 11/15/2012 03:15 PM

Subject: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo - Revised

November 2012

Dear Mr. Mendoza,

On behalf of Mike Erickson, please find attached the "Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo- Revised November 2012" . A hard copy of this memo is being sent by FedEx for delivery tomorrow.

Should you have any questions, please contact Mike at your convenience.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

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D: 810.225.1981 | O: 810.229.8594

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Ramon To JAMES SARIC

Mendoza/R5/USEPA/US cc 11/20/2012 04:03 PM bcc

> Subject Re: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo - Revised November 2012

Gary called me this afternoon and they are starting work on Dec. 3. I am available Dec. 3-6 to do the Shoreline full Survey. GP says they also have a boat. Let me know which dates that you /DNR can make it. I am not available Dec. 7-14 (am on call).

Gary will be sending us a PCB SAP for 10A.

Ramon

JAMES SARIC Ramon, This looks great. Thanks for t... 11/20/2012 03:12:05 PM

From: JAMES SARIC/R5/USEPA/US

To: Ramon Mendoza/R5/USEPA/US@EPA,

Date: 11/20/2012 03:12 PM

Subject: Re: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo -

Revised November 2012

Ramon,

This looks great. Thanks for taking care of this so guickly.

Jim

-----Ramon Mendoza/R5/USEPA/US wrote: -----

To: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

From: Ramon Mendoza/R5/USEPA/US

Date: 11/20/2012 11:49AM

Cc: Judith Alfano <alfanoj@michigan.gov>, Paul Bucholtz <bucholtzp@michigan.gov>, "Garry T. Griffith"

<gtgriffi@GAPAC.com>, "Sharon Hanshue " <hanshues@michigan.gov>, "Jessica Winter "

<jessica.winter@noaa.gov>, Julie Sims <julie.sims@noaa.gov>, Lisa Williams

<Lisa_Williams@fws.gov>, "Erickson, Michael" <Michael.Erickson@arcadis-us.com>, Mark Mills

<millsm@michigan.gov>, SAMUEL BORRIES/R5/USEPA/US@EPA, "Todd Goeks"

<Todd.Goeks@noaa.gov>

Subject: Re: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo -

Revised November 2012

Ms. Shreve, Attached, Please find our response to the subject document. A hard copy is being mailed today. Should you have any questions, please contact me at 312-886-4314.

(See attached file: EPAComment.PlainWell.Dam2.RepairMemo11.2012.pdf)

Sincerely, Ramon Mendoza, On-Scene Coordinator USEPA Region 5

"Shreve, Barb" ---11/15/2012 03:15:53 PM---Dear Mr. Mendoza, On behalf of Mike Erickson, please find attached the "Former Plainwell Impoundment

From: "Shreve, Barb" <Barb.Shreve@arcadis-us.com>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: Judith Alfano <alfanoj@michigan.gov>, SAMUEL BORRIES/R5/USEPA/US@EPA, Paul Bucholtz

<bucholtzp@michigan.gov>, "Todd Goeks " <Todd.Goeks@noaa.gov>, "Garry T. Griffith"

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<millsm@michigan.gov>, Julie Sims <julie.sims@noaa.gov>, Lisa Williams <Lisa_Williams@fws.gov>,
"Jessica Winter " <jessica.winter@noaa.gov>, "Erickson, Michael" <Michael.Erickson@arcadis-us.com>

Date: 11/15/2012 03:15 PM

Subject: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo - Revised

November 2012

Dear Mr. Mendoza,

On behalf of Mike Erickson, please find attached the "Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo- Revised November 2012". A hard copy of this memo is being sent by FedEx for delivery tomorrow.

Should you have any questions, please contact Mike at your convenience.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

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[attachment "EPAComment.PlainWell.Dam2.RepairMemo11.2012.pdf" removed by JAMES SARIC/R5/USEPA/US]

"Erickson, Michael" <Michael.Erickson@arcadis-u s.com>

11/26/2012 10:38 AM

To JAMES SARIC

cc "Bucholtz, Paul (DEQ)", "'Jeff.Keiser@CH2M.com'", "Griffith, Garry T."

bcc

Subject Discussion items for our Nov 28th meeting in Chicago

Hi Jim.

I hope you had a nice Thanksgiving. Attached is a draft list of discussion items for our project update meeting scheduled for 10 AM CT this Wednesday, Nov 28 at your office in Chicago.

Regards, Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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restricted by law. 2012 Nov 28 project_update_mtg_items.doc

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

11/26/2012 05:00 PM

To JAMES SARIC, Paul Bucholtz

cc "Garry T. Griffith", "Mark P. Brown", "Jeff Keiser ", "VanDewalker, Heather", "Erickson, Michael"

bcc

Subject Responses to Comments on the Area 1 Alternatives Screening Technical Memorandum Nov26,2012

Dear Messrs. Saric and Bucholtz

On behalf of Mr. Erickson, please find attached responses to U.S. Environmental Protection Agency and Michigan Department of Environmental Quality comments regarding the *Area 1 Alternatives Screening Technical Memorandum*. A hardcopy of this document will be sent via FedEx today for delivery tomorrow.

At your convenience please contact Mike directly with any questions you might have.

Respectfully, Barb Shreve on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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Responses to Comments on the Area 1 Alternatives Screening Technical Memorandum_Nov26,2012.pdf

"Scoville, Michael" <Michael.Scoville@arcadis-us .com>

11/28/2012 01:51 PM

To "Santini, Andrew (SantiniAD@cdmsmith.com)"

cc "Erickson, Michael", "Penniman, Dawn", "Paul Bucholtz (bucholtzp@michigan.gov)", JAMES SARIC

bcc

Subject Database Update

Drew, as you requested, attached are the LOCATION, PROBE, FIELDINFO, and LABDATA tables containing the data collected in Area 2 subsequent to the our last database submittal. These data include additional soil and sediment data collected in early June, and are in the same format as previous database submittals so they can be easily appended in Access. This should give you the complete data set used in the development of the Area 2 SRI Report.

Please let me know if you have any questions or comments.

Mike

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restricted by law. KZOODB_Update_112812.xlsx

Milt Clark <mclark-59@comcast.net> 11/28/2012 05:08 PM To JAMES SARIC

cc "Paul (MDEQ) Bucholtz", Jeff.Keiser
bcc

Subject Re: Court Case, Sediment RALs and Risks

Jim, I think this pre-discussion is good. Let me offer just a couple of short clarifying points and we can hold off until we gather on the 18th.

- 1) I will check again the Sed 2 through 5 options regarding the use of sediment RALs and evaluations. I may have missed something.
- 2) Fully agree that complete risk evaluations (and targets) are needed for all alternatives and fishing groups
- 3) While I do hear you regarding the large removals conducted in Area 1, my first impression is that Sed 2-5 alternatives appear not to give adequate risk protection. By adding at least one RAL below 1 ppm and one or two between 1 and 50 ppm for Area 1, it would give a wider range of possible risk management options.
- 4) Fully that we don't want to see a complex model developed for the site, because it would take years. The GP approach actually has some inputs other than just fish data that modifies the projections and has not addressed uncertainty. John Kern, who has done some elegant fish trend work, could help clean up the current GP approach, if they are agreeable. My suggestion to include the risks immediately following a post-remedial SWAC is to include another simple risk management tool, with less uncertainty than projected models, that has been used on other sites. We are on the same page regarding not using the older fish data.
- 5) Great to hear your support of range of RALs in general and need to address uncertainty I also look forward to discussing the topics further on the 18th,
 Milt

On Nov 28, 2012, at 9:09 AM, Saric.James@epamail.epa.gov wrote:

Milt, Actually there were several options all Sed 2 through Sed 5 that thoroughly evaluate cleanup options with the 1ppm and 50 ppm being on the outer boundaries. Figure 5-14 from the ASTM shows Potential PCB RALs and SWACs for the entire 20 miles stretch. Although valuable I don't think there is any benefit in (Area 1) of further evaluating numbers less than 1 ppm or something inbetween 1 and 50. However, all of the Sed 2 through Sed 5 options need to be expressed in terms of RIsk (i.e. 10 -5 etc.) and include the time to reach various fish consumption end points, and the cost of each remedy, and include future monitoring activities that will be conducted to prove the fish reductions are occurring as anticipated.

Regarding models, I do not see a model being developed at this site, although we could be headed there for Trowbridge and Lake Allegan. However, give the 20-plus years of fish monitoring, I think we are fortunate to be able to use real data and simple decay models to indicate where fish concentrations may be over time. So, I think the GP approach they are using with fish data is the proper path. However, I think, as you have said in the past they should NOT be using the fish data from the early 1990s in the decay curves, as there were ongoing PCB sources in the river. They should eliminate that data point and only use slopes from say post 2000 fish data. I agree with all of that.

I guess my point is that Area 1 needs to be looked at differently than Area 2. We have done or in the process of addressing the 3 largest sources of contamination in Area 1: Plainwell, Plainwell 2, and Portage Creek. The question is what remaining work should be done in Area 1. I think the FS lays out several options for additional work. However, each of those options needs further discussion regarding expressing Risk reduction, uncertainty, etc. as discussed above.

Area 2 is a different animal in that there have not been any removal actions. In the case of Area 2 I agree with you that I will want detailed evaluation of various sediment RALs from below 1 ppm and between 1 ppm and 50 ppm. So, I think overall we are on the same page regarding how the FS documents and remedies evaluated. It's just in Area 1 we have done a lot of work and have identified the areas that may need to be further addressed.

Looking forward to discussing this further on 12/18.

Jim

<graycol.gif>Milt Clark ---11/28/2012 08:43:40 AM----Jim, Based upon my own preliminary review, all the sediment RALs but the 1 and 50 ppm were inappropr

From: Milt Clark < mclark-59@comcast.net To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: "Paul (MDEQ) Bucholtz" < BUCHOLTZP@michigan.gov>

Date: 11/28/2012 08:43 AM

Subject: Court Case, Sediment RALs and Risks

Jim,

Based upon my own preliminary review, all the sediment RALs but the 1 and 50 ppm were inappropriately dismissed by simply a comparison to mass removal and not risk reduction (fish tissue) or cost results. Mass removal, while important, does not directly equate to risk. As a result there are only two basic alternatives throughly evaluated: hot spot cleanups with the 50 ppm and then just the 1 ppm, with the 1.0 ppm looking highly costly and unreasonable. While 1.0 ppm is a great number, it is very difficult to defend without comparison to other RALs carried completely through risk, time to fish consumption (sm bass), and cost comparisons as done for the Fox River.

If you look at FS Table 5-14, there is a difference in post-remedial SWACs with RALs, ranging from 0.07 ppm (0.1 RAL) to 0.56 ppm (50 RAL) which will yield different fish tissue levels and risks. Interestingly, a 5 ppm RAL gives you a 0.28 ppm post-remedial SWAC which is basically the near term goal (0.25 ppm) was for the Fox River (and now for Waukegan Harbor, with just a simple post remedial BSAF model, without time) with MNR yielding lower results and reduced risks 10 and 30 years out. Without running more RALs through the risk and cost process it not easy to see what would be the best cost-effective, but protective remedy.

While I personally like models as an aid in decision making, we are also on a very slippery slope relining only on GP generated models to predict future fish tissue results,

which have input variables that are questionable and do not include uncertainty. For risk management decision-making, we would be in a better position to also include post-remedial fish tissue levels and risks for a range of RALs and then use a model (that we can all agree on, with uncertainty) to look at fish tissue results 10 and 30 years out, the later done for the fox.

Just some food for thought and for further discussion perhaps on the Dec 18,

Milt

On Nov 26, 2012, at 1:30 PM, Saric James@epamail.epa.gov wrote:

Milt,

The FS does evaluate various RALs from .1 to 50 but really only focuses on 1ppm. The 50 is just a TSCA benchmark. I do agree that all the remedies need to include time-frame to reach various fish tissue and human health benchmarks. That information is provided in the FS, although I believe it should not include the pre-2000 fish data for their SWAC time-frame predictions. I have the CSTAG group at EPA -HQ reviewing the FS for consistency with the RAOs, SWAC application and monitoring parameters post-rod which should be included in any remedy. I guess my question is do you think that the 1 ppm is not appropriate?

Jim

<graycol.gif>Milt Clark ---11/26/2012 12:48:39 PM---You both may already know of the recent, important court decision (attached) concerning the Fox Rive

From: Milt Clark < mclark-59@comcast.net >

To: "Paul (DEQ) Bucholtz" < BUCHOLTZP@michigan.gov >, JAMES SARIC/R5/USEPA/US@EPA,

Date: 11/26/2012 12:48 PM

Subject: Court Findings for Fox Fiver

You both may already know of the recent, important court decision (attached) concerning the Fox River which supported U.S. EPA and WDNR cleanup methodology. We used a range of sediment RALs based upon fish tissue, human health risks, and time to safe consumption in the FS and RODs to select a final RAL of 1 ppm.

Note the excerpt from the court decision (below) which fully supported the range approach. Obviously, the FS for the Kalamazoo lacks a similar robust approach, having only two wide ranging sediment RALs of 50 and 1 ppm. As you both know, a 50 ppm sediment RAL value was applied 15 years ago for Waukegan Harbor and no site since then (including removals) has ever used a 50 ppm RAL. The PCB residues left using a 50 ppm sediment targeting did not permit attainment of acceptable PCB levels in fish 10 years post dredging. As a result a

new ROD for Waukegan Harbor was developed using a 1 ppm RAL to yield acceptable fish tissue levels. (For what it is worth, I either directly conducted or oversaw the risk assessments for Waukegan Harbor, Fox River, Manistique Harbor, and Bryant Mill Pond and was involved in developing the RALs for a range of fish tissue, risk based results).

From the court decision:

The "remedial action level" ("RAL") that would trigger the need for sediment removal was established at 1 part per million, meaning that sediment containing that amount or more would be targeted for removal. (Id. at 14.) Other action levels considered were 0.125 ppm, 0.25 ppm, 0.5 ppm, 5 ppm, and, of course, the "no action" alternative that would leave the PCBs untouched. Naturally, the action level would dictate how much sediment needed to be removed—a higher action level would require much less dredging than a more stringent threshold. The governments determined that 1 ppm was an appropriate benchmark. For example, at a concentration of 1 ppm, walleye would be safe for consumption within one year, whereas at the 5 ppm level they would not be safe to eat for 29 years. (ECF No. 439-12 at 98-100.) On the other side of the coin, the ROD observed that concentrations lower than 1 ppm would have only marginal reductions on PCBs in fish tissue, and thus concluded that "there is limited risk reduction achieved by selecting an RAL of less than 1 ppm." (Id. at 99; ECF No. 404-2 at 155.)2 [attachment "MSJ.pdf" deleted by JAMES SARIC/R5/USEPA/US]

Ramon To "Griffith, Garry T."

Mendoza/R5/USEPA/US

11/29/2012 08:52 AM CC 'Paul Bucholtz', "'Suardini, Ej", "'Hritsuk, Eric'", "'Erickson, Michael", 'Mark Mills', Mike Ribordy

bcc

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"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

11/30/2012 02:50 PM

To JAMES SARIC

cc "Blischke, Eric (blischkee@cdmsmith.com)", "King, Todd W. (KingTW@cdmsmith.com)", "Santini, Andrew (SantiniAD@cdmsmith.com)", "Bradley, John (DEQ)", "Gendusa, Tony (GendusaTC@cdmsmith.com)", "John Kern (kernstat@gmail.com) (kernstat@gmail.com)", "Lavelle, James (LavelleJM@cdmsmith.com)", "Milt Clark (mclark-59@comcast.net)", "Schultz, Michael S. (Cambridge) (SchultzMS@cdmsmith.com)", "Jeff.Keiser@CH2M.com", "Patricia.White@CH2M.com", "Frank.Dillon@CH2M.com", "Devantier, Daria W. (DEQ)"

bcc

Subject FW: Area1FSPreliminaryCommentsMDEQtoEPA_Final.docx

Jim,

This is our early draft list of FS items following our initial review. We hope this will help point us in a discussion direction for our meeting on 12/18. Let me know if you or your team wants any clarification on items in the interim.

Paul



Area1FSPreliminaryCommentsMDEQtoEPA_Final.docx

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

11/30/2012 02:56 PM

To JAMES SARIC

CC Paul Bucholtz, Judith Alfano, "Sharon Hanshue ", "Todd Goeks ", Lisa Williams, "Jeff Keiser ", "Garry T. Griffith", "Mark P. Brown", Martin Lebo, "Richard Gay ", "Kathy Huibregtse ", "Erickson, Michael"

bcc

Subject Area 4/Former Trowbridge Impoundment Supplemental Remedial Investigation/ Feasibility Study (SRI/FS) Work Plan

Dear Mr. Saric,

On behalf of Mr. Erickson, this email transmits the *Area 4/Former Trowbridge Impoundment Supplemental Remedial Investigation/ Feasibility Study (SRI/FS) Work Plan* for Federal and State Review.

This document has been posted on an ftp site and is accessible using the instructions below. Please note the text, figures, tables and appendices are posted in the ftp folder. The data files for the appendices will be provided on the DVDs attached to the hard copy submittal of the work plan. Hard copies will be sent by Fed Ex for Monday delivery.

At your convenience please contact Mike directly with any questions you might have.

FTP instructions

Start here: http://secureftp.arcadis-us.com/thinclient

And use these credentials:

Username: Area4_WP_Nov2012(the site will automatically add on @secureftp.arcadis-us.com

this is necessary)

Password: Area4 WP Nov2012

Once you have accessed the site, check the box to the left of the document name you want to view and then click on the "Download files" button. <u>Please note that you will need to use Internet Explorer to access the site</u>.

Respectfully,

Barb Shreve on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

www.arcadis-us.com

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<Patricia.White@CH2M.com>

12/03/2012 01:14 PM

To Jeff.Keiser, JAMES SARIC

cc Frank.Dillon

bcc

Subject Kern fish trend analysis

FYI - Attached is Kern's fish trend analysis that he wrote up in 2011 (he sent this to Frank during the July 2012 meeting in Detroit).

Some of the analyses in this memo speak directly to some of the questions from Steve Ells (i.e., relationship of sediment concentrations to fish tissue concentrations; using Morrow Lake as a background area).

We can talk about this more during the kickoff call this afternoon, but one key issue that we will need to resolve is the area over which sediment and fish tissue concentrations should be averaged (e.g. by ABSA, by river section, other?). GP averaged over Area 1 as a whole.

Patty

Patty White CH2M HILL Direct 617.721.2527 Fax 773.693.4707 www.ch2mhill.com

PDF

2011-07-14FishTrendUpdate.pdf

JAMES SARIC/R5/USEPA/US To Susan Virgilio

cc hcc

12/05/2012 11:43 AM

Subject Fw: Kalamazoo Dam safety inspection reports

Sue.

Here's the dam reports. I am not sure if there are more recent reports.

Jim

----- Forwarded by JAMES SARIC/R5/USEPA/US on 12/05/2012 11:42 AM -----

From: "Sharon Hanshue" <hanshues@michigan.gov>

To: "Michael Erickson" < Michael.Erickson@arcadis-us.com>, JAMES SARIC/R5/USEPA/US@EPA,

"Garry T.' 'Griffith" <gtgriffi@GAPAC.com>,

Cc: "Paul Bucholtz" <BUCHOLTZP@michigan.gov>, "Arminda Koch" <KOCHA@michigan.gov>, "John

Lerg" <LERGJ@michigan.gov>, "Sara Schaefer" <SchaeferS1@michigan.gov>

Date: 06/17/2010 12:56 PM

Subject: Kalamazoo Dam safety inspection reports

** High Priority **

Good afternoon -

DNRE recently contracted for professional engineering services to do a dam safety inspection of the 2 remaining DNRE owned dams on the Kalamazoo river - copies are attached. Please note the continuing deterioration of the Otsego dam associated with the spillway cracking and shifting. We are very concerned that this shifting concrete is both a symptom of undermining of the spillway apron and a contributing agent to it.

We also note some erosion to the left wing wall embankment of the Trowbridge dam, John Lerg, DNRE, Wildlife Division will be securing contract services to address that issue as soon as possible. This is also cause for serious concern as the bank is quite vulnerable to erosive forces that could eventually erode through the embankment, bypassing the dam. We are taking steps to be sure the emergency action plans are up to date but please consider the extremely poor condition of these structures. Your action is urgently needed to move as quickly as possible to resolve PCB removal in these former impoundments since these dams must now be considered completely unreliable.

Please let John or I know if you have any questions.

Sharon Hanshue Habitat Management Unit MDNR - Fisheries Division hanshues@michigan.gov



PDF

Dam Safety report_Otsego_2010.pdf

Dam Safety Report Trowbridge 2010.pdf

Susan Virgilio /R5/USEPA/US

To JAMES SARIC

12/05/2012 03:48 PM

cc Edwin Smith

bcc

Subject Re: Fw: Kalamazoo Dam safety inspection reports

Thanks Jim. I just spoke to John Riley. We discussed the Agency's expectations for the RAP.

My understanding is that Chris K had called the DEQ to set up the meeting, but, as of Monday, had not heard anything. John has not heard anything from his management about the meeting.

Susan A. Virgilio U.S. EPA, Region V Great Lakes National Program Office (G17-J) 77 W. Jackson Chicago, IL 60604 email: virgilio.susan@epa.gov 312-886-4244 (phone) 312-692-2430 (fax)

JAMES SARIC Sue, Here's the dam reports. I am not... 12/05/2012 11:43:47 AM

From: JAMES SARIC/R5/USEPA/US
To: Susan Virgilio/R5/USEPA/US@EPA

Date: 12/05/2012 11:43 AM

Subject: Fw: Kalamazoo Dam safety inspection reports

Sue,

Here's the dam reports. I am not sure if there are more recent reports.

Jim

---- Forwarded by JAMES SARIC/R5/USEPA/US on 12/05/2012 11:42 AM -----

From: "Sharon Hanshue" <hanshues@michigan.gov>

To: "Michael Erickson" < Michael. Erickson@arcadis-us.com>, JAMES SARIC/R5/USEPA/US@EPA,

"Garry T.' 'Griffith" < gtgriffi@GAPAC.com>,

Cc: "Paul Bucholtz" <BUCHOLTZP@michigan.gov>, "Arminda Koch" <KOCHA@michigan.gov>, "John

Lerg" <LERGJ@michigan.gov>, "Sara Schaefer" <SchaeferS1@michigan.gov>

Date: 06/17/2010 12:56 PM

Subject: Kalamazoo Dam safety inspection reports

** High Priority **

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Please let John or I know if you have any questions.

Sharon Hanshue Habitat Management Unit MDNR - Fisheries Division hanshues@michigan.gov

[attachment "Dam Safety report_Otsego_2010.pdf" deleted by Susan Virgilio/R5/USEPA/US] [attachment "Dam Safety Report Trowbridge 2010.pdf" deleted by Susan Virgilio/R5/USEPA/US]

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

12/06/2012 03:17 PM

To JAMES SARIC, Paul Bucholtz

cc "Garry T. Griffith", "Erickson, Michael"

bcc

Subject Area 4/Former Trowbridge Impoundment /Geo-Referenced Historic Aerial Photos

Dear Mr. Saric and Mr. Bucholtz,

On behalf of Mr. Erickson, this email transmits, by posting to an ftp site, the geo-referenced historical aerial photos and shorelines presented in the Area 4/Former Trowbridge Impoundment SRI/FS Work Plan.

The files are accessible using the instructions below. At your convenience, please contact Mike directly with any questions you might have.

FTP instructions

Start here: http://secureftp.arcadis-us.com/thinclient

And use these credentials:

Username: A4-Geo-Ref-Hist-Aerials(the site will automatically add on @

secureftp.arcadis-us.com - this is necessary)

Password: A4-Geo-Ref-Hist-Aerials

Once you have accessed the site, check the box to the left of the document name you want to view and then click on the "Download files" button. <u>Please note that you will need to use Internet Explorer to access the site.</u>

Respectfully,

Barb Shreve on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594 | D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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restricted by law.

<Patricia.White@CH2M.com>

12/10/2012 10:12 AM

To JAMES SARIC, Jeff.Keiser

cc Frank.Dillon, William.Andrae

hcc

Subject RE: Agenda for todays charter, Phone: 866 203 7023, Part

Code 317 547 8225

I think this is a good idea. Given that floodplains are primarily depositional features and the vegetation would tend to hold soil in place, I doubt that much soil is eroded from the floodplains by overland flow. I would be more concerned about channel migration. Ongoing monitoring of channel stability could be a component of the remedy to monitor these transport pathways. If sediment and fish tissue PCB levels don't decrease as expected through natural recovery, then the ongoing loading from the banks and floodplain could be re-examined more closely.

Patty

From: Saric.James@epamail.epa.gov [mailto:Saric.James@epamail.epa.gov]

Sent: Monday, December 10, 2012 10:52 AM

To: Keiser, Jeff/MKE

Cc: Dillon, Frank/DET; White, Patricia/BOS; Andrae, Bill/MKE

Subject: Re: Agenda for todays charter, Phone: 866 203 7023, Part Code 317 547 8225

Quick recommendation regarding the RAOs. Given that RAO 4 indirectly addresses the release of PCBs from the floodplains into the river, and MDEQ wants a specific RAO for the floodplains, what does everyone think about revising RAO 4 to read the following.

RAO 4 should add the following sentence after the first sentence in bold text. "Including transport of PCBs from riverbank and floodplain soils to the Kalamazoo River."

---12/03/2012 12:24:55 PM---Attached is a Power Point with talking points for today's charter. If you have any questions please

From: <Jeff.Keiser@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA, < William. Andrae@CH2M.com >, < Patricia. White@CH2M.com >, <

Frank.Dillon@CH2M.com>,

Date: 12/03/2012 12:24 PM

Subject: Agenda for todays charter, Phone: 866 203 7023, Part Code 317 547 8225

Attached is a Power Point with talking points for today's charter. If you have any questions please give me a call or we can discuss during the charter. I listed several issues we need to consider while reviewing the documents.

Remember you owe me your idea of the preferred alternatives before the call.

Jeff Keiser Project Manager 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct – 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893

www.jkeiser@ch2m.com

Solutions without Boundaries

[attachment "Kalamazoo River Task Charter.pptx" deleted by JAMES SARIC/R5/USEPA/US]

"McGuire, Pat"
<Pat.McGuire@arcadis-us.co
m>

12/11/2012 03:32 PM

To Michael Berkoff

cc "Erickson, Michael", "Garry Griffith (gtgriffi@GAPAC.com)",
"J. Michael Davis (jmdavis@gapac.com)", JAMES SARIC,
"Jeff Keiser (jkeiser@CH2M.com)", "Judith (Gapp) Alfano
(alfanoj@michigan.gov)", "Kathy Huibregtse
(khuibregtse@environcorp.com)", "Kristi Zakrzewski
(ZakrzewskiK@michigan.gov)", Leslie Kirby-Miles, "Lisa L.,
PhD Williams (Lisa_Williams@fws.gov)", "Martin Lebo
(martin.lebo@weyerhaeuser.com)", Nicole Wood, "Paul A.,
P.E. Montney (pamontne@gapac.com)", "Paul T. Bucholtz
(bucholtp@michigan.gov)", "Polly Synk
(SynkP@michigan.gov)", "Richard Gay
(richard.gay@weyerhaeuser.com)", Scott Hutsell, "Todd
Goeks (Todd.Goeks@noaa.gov)", "Melda, Zachary A.",
Jessica Winter, Sharon Hanshue

bcc

Subject Willow Boulevard/A-Site Landfill OU2 Progress Report

Michael

Attached for your records is the Willow Blvd/A-Site OU2 November 2012 Progress Report, which covers the period between November 1 and November 30. If you have any questions regarding this report please do not hesitate to contact me.

Thanks Pat

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restricted by law. Dec 2012 WB_A-Site OU Progress Report_FINAL USEPA_12 11 12.pdf.pdf

Mike Ribordy /R5/USEPA/US

To Ramon Mendoza

12/12/2012 03:15 PM cc

bcc

Subject Re: Plainwell impoundment change in OSC notification.

Ramon,

I've put you in charge of both impoundment and Dam #2. Makes things easier with Sam not coming back.

Here's the letter. Add our attorney to cc list (Leslie is leaving right?)



Change in OSC Letter 12-12-12.doc

Ramon Mendoza Hello Mike: Gary Griffith from Georgi... 12/12/2012 02:35:30 PM

From: Ramon Mendoza/R5/USEPA/US

To: Mike Ribordy/R5/USEPA/US@EPA, Janet Carlson/R5/USEPA/US@EPA,

Cc: Nicole Wood/R5/USEPA/US@EPA

Date: 12/12/2012 02:35 PM

Subject: Plainwell impoundment chane in OSC notification.

Hello Mike:

Gary Griffith from Georgia Pacific wants an official EPA letter notifying them that I am the OSC under the TCRA (see their notification below). I have a drafted the letter (coming from Sam). Please advise and comment so we can send over asap. FYI, I only disignated me as the OSC for the Plainwell Impoundment and not for the Plainwell 2 TCRA. I will leave it up to you to put that one in.

[attachment "OSC.Change.Notification.doc" deleted by Mike Ribordy/R5/USEPA/US]

Thanks, Ramon

----- Forwarded by Ramon Mendoza/R5/USEPA/US on 12/12/2012 02:01 PM -----

From: "Griffith, Garry T." <gtgriffi@GAPAC.com>
To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: 'Judith Alfano' <alfanoj@michigan.gov>, 'Paul Bucholtz'
bucholtzp@michigan.gov>, 'Sharon Hanshue ' <hanshues@michigan.gov>, 'Jessica Winter ' <jessica.winter@noaa.gov>, 'Julie Sims'

<julie.sims@noaa.gov>, 'Lisa Williams' <Lisa_Williams@fws.gov>, "'Erickson, Michael'"
<Michael.Erickson@arcadis-us.com>, 'Mark Mills' <millsm@michigan.gov>, SAMUEL
BORRIES/R5/USEPA/US@EPA, 'Todd Goeks ' <Todd.Goeks@noaa.gov>, Janet
Carlson/R5/USEPA/US@EPA, Nicole Wood/R5/USEPA/US@EPA, "'Hritsuk, Eric'"

<Eric.Hritsuk@arcadis-us.com>

Date: 12/11/2012 03:59 PM

Subject: RE: Proposed Bank Soil PCB Sampling Plan for Removal Area 10A of the Former Plainwell

Impoundment

Ramon,

This email will confirm our conversation yesterday on the subject.

1. Removal Area 10A sampling plan – thank you for the quick approval of the plan. We are agreeable to collecting and analyzing 5 samples from the area. ARCADIS has updated the

sample layout figure (attached). The samples will be analyzed for Total PCB using method 8082 with a maximum detection level of 0.33 mg/kg. This method is established in the USEPA-approved QAPP. ARCADIS plans to collect the samples on Monday December 17, 2012. Please contact Mike Kohagen, ARCADIS (248.808.3701) when you arrive at the site on Monday to coordinate.

- 2. Removal Area 4A the bank maintenance will be extended on the downstream end of the removal area as requested in your December 8, 2012 email.
- 3. Exposed Geotextile thank you for providing the coordinates for the locations you observed during the December 3rd boat tour of the site with MDEQ. Rock will be placed to cover the exposed material.
- 4. Additional Area upstream of Removal Area 2A Georgia-Pacific does not plan to armor the bank area located upstream of Removal Area 2A. This area was not included in the former Plainwell Dam TCRA project. While the exposed bank below the median water level has been disturbed by burrowing animals, i.e. muskrats, it does not appear to be erosional. This area will be discussed in the 2012 Bank Conditions Monitoring Report.
- 5. 2012 Bank Maintenance Terra Contracting is mobilizing equipment to the Removal Area 4A on December 11, 2012 and plans to begin maintenance work on December 12, 2012. ARCADIS will be providing oversight for the work. Please note that due to difficulties in obtaining an adequate supply of the round restoration stone that meets the required size specification, Terra will be supplementing the available on-site supply of restoration rock with angular rip rap to complete the requested maintenance.
- 6. 2012 Bank Conditions Monitoring Report (BCMR) Due to the late start on the 2012 bank maintenance work, and the requirement for report submittal prior to December 31, 2012, the report will not include specific documentation of the 2012 maintenance work. That documentation will be submitted separately as an addendum to the report in January 2013.
- 7. Future correspondence relative to the former Plainwell Impoundment and Plainwell No. 2 Dam TCRAs Per the requirements of the consent order, please direct all correspondence to me as I am the designated Project Coordinator, per the attached notification letter dated August 4, 2011. We request that EPA formally notify GP of your status as EPAs CSO for the project at your earliest opportunity. I also request that Mike Erickson, ARCADIS be copied on all correspondence.

Please contact me should you have any questions or comments on this correspondence.

Garry Griffith, P.E. Georgia-Pacific LLC 734.735.0780

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Saturday, December 08, 2012 1:19 AM

To: Shreve, Barb

Cc: Judith Alfano; Paul Bucholtz; Griffith, Garry T.; Sharon Hanshue; Jessica Winter; Julie Sims; Lisa

Williams; Erickson, Michael; Mark Mills; Borries.Samuel@epamail.epa.gov; Todd Goeks;

Carlson.Janet@epamail.epa.gov; Wood.Nicole@epa.gov

Subject: Re: Proposed Bank Soil PCB Sampling Plan for Removal Area 10A of the Former Plainwell

Impoundment

Ms. Shreve, Attached please find our inspection report from Dec. 3 inspection which includes our request for repair in the areas specified.

(See attached file: EPA.InspectionPLainweill.Impoundment.12.3..pdf)

In addition, I approve the Proposed Bank Soil PCB Sampling Plan for Removal Area 10A contingent on ARCADIS/GP addressing the following comments:

- 1) Please specify analytical method for PCB analysis including the detection limit and its appropriateness relative to the approved cleanup levels.
- 2) During the Dec. 3 inspection we noted that the visible contaminated material was about two feet in depth and three borings may not be enough to adequately characterize the exposed material. We recommend additional borings (two) to ensure ARCADIS can characterize the material adequately.
- 3) Please specify the dates of sampling to ensure that EPA or its representatives can observe the sampling event.

Please contact me if any questions,

Thank you, Ramon Mendoza, OSC 312-802-1409

"Shreve, Barb" ---12/07/2012 01:44:05 PM---Dear Mr. Mendoza, On behalf of Mike Erickson, please find attached the "Proposed Bank Soil PCB Sampl

From: "Shreve, Barb" < Barb.Shreve@arcadis-us.com>

To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: Judith Alfano <alfanoj@michigan.gov>, SAMUEL BORRIES/R5/USEPA/US@EPA, Paul Bucholtz <<u>bucholtzp@michigan.gov</u>>, "Todd Goeks ", "Garry T. Griffith" , "Sharon Hanshue" , "Ulie Sims , "Ul

Subject: Proposed Bank Soil PCB Sampling Plan for Removal Area 10A of the Former Plainwell Impoundment

Dear Mr. Mendoza,

On behalf of Mike Erickson, please find attached the "Proposed Bank Soil PCB Sampling Plan for Removal Area 10A of the Former Plainwell Impoundment Time-Critical Removal Action Area".

The bank repair work summarized in the November 15, 2012 technical memo that was initially scheduled to begin during the week of December 3 has been delayed due to wet weather. Mobilization is currently anticipated to occur on Tuesday, December 11, with repair work beginning that afternoon or on the morning of December 12. We look forward to receipt of EPA's summary of the Dec 3rd site inspection and timely approval of this sampling

plan so that the results are available while we have equipment at the site.

A hardcopy of this letter will be sent via FedEx today. Should you have any questions, please contact Mike at your convenience.

Respectfully,
Barb Shreve on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

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"Bradley, John (DEQ)" <BRADLEYJ1@michigan.gov

12/13/2012 11:44 AM

To Michael Berkoff, JAMES SARIC

cc "Zakrzewski, Kristi (DEQ)", "Devantier, Daria W. (DEQ)"

bcc

Subject API/PC/KR OU2 EPA/MDEQ 12-13-12 Meeting Materials

The attachments are provided for purposes of the API/PC/KR OU2 EPA/MDEQ 12-13-12 Meeting

John Bradley
Senior Geologist
Michigan Department of Environmental Quality
Remediation and Redevelopment Division / Superfund Section
bradleyj1@michigan.gov (517) 335-3146









OU2 GW Actual Scale.pdf 1938.jpg 1-s2_0-S0037073898001456-gr3.gif Redrawn-Fluvial-HiearchiesR.jpg

"Griffith, Garry T." <gtgriffi@GAPAC.com>

12/13/2012 11:58 AM

To Richard Karl, JAMES SARIC, Joan Tanaka, Leslie Kirby-Miles, REBECCA FREY, 'R0612B/R5 Metcalfe - 06th Floor', "Massengill, Dave G.", "Davis, Michael (GP Law)" cc

bcc

Subject RE: Rescheduled: Kalamazoo River (Dec 17 01:30 PM CST in R0612B/R5 Metcalfe - 06th Floor@EPA)

Rick,

GP would like to discuss the following topics:

- 1. Floodplain Risk Assessment
- 2. Area 1 Remedy
- 3. Former Plainwell Impoundment TCRA Monitoring and Maintenance Transfer to MDNR
- 4. Other PRPs
- 5. EPA Cost Recovery Invoice Documentation

Please note that Diane Schmidt and Steve Scofes are planning to attend the meeting in addition to Michael, Dave and myself.

Regards,

Garry Griffith, P.E. Georgia-Pacific LLC 734.735.0780

----Original Appointment----

From: RICHARD KARL/R5/USEPA/US [mailto:Karl.Richard@epamail.epa.gov]

Sent: Wednesday, October 24, 2012 11:11 AM

To: 'Richard Karl/R5/USEPA/US'; Griffith, Garry T.; 'JAMES SARIC/R5/USEPA/US'; 'Joan

Tanaka/R5/USEPA/US'; 'Leslie Kirby-Miles/R5/USEPA/US'; 'REBECCA FREY/R5/USEPA/US'; 'R0612B/R5

Metcalfe - 06th Floor'; Massengill, Dave G.; Davis, Michael (GP Law)

Subject: Rescheduled: Kalamazoo River (Dec 17 01:30 PM CST in R0612B/R5 Metcalfe - 06th

Floor@EPA)

When: Monday, December 17, 2012 2:30 PM-4:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where:

<< File: ecblank.gif >> << File: pic17829.gif >> << File: ATT00001.htm >> << File: c083903.ics >>

"Zakrzewski, Kristi (DEQ)" <ZakrzewskiK @michigan .gov

12/13/2012 12:48 PM

To "Bradley, John (DEQ)", Michael Berkoff, JAMES SARIC, "Jeff.Keiser@CH2M.com"

cc "Devantier, Daria W. (DEQ)"

bcc

Subject RE: API/PC/KR OU2 EPA/MDEQ 12-13-12 Meeting

Materials

Here are a couple more files for the call.

Thanks! Kristi

Kristi Zakrzewski, P.E. **MDEQ Superfund Section** P: 517-373-2937 zakrzewskik@michigan.gov

From: Bradley, John (DEQ)

Sent: Thursday, December 13, 2012 12:45 PM

To: 'Berkoff.Michael@epamail.epa.gov' (Berkoff.Michael@epamail.epa.gov);

'Saric.James@epamail.epa.gov' (Saric.James@epamail.epa.gov) Cc: Zakrzewski, Kristi (DEQ); Devantier, Daria W. (DEQ)

Subject: API/PC/KR OU2 EPA/MDEQ 12-13-12 Meeting Materials

The attachments are provided for purposes of the API/PC/KR OU2 EPA/MDEQ 12-13-12 Meeting

John Bradley Senior Geologist Michigan Department of Environmental Quality Remediation and Redevelopment Division / Superfund Section bradleyj1@michigan.gov (517) 335-3146





OU2 Logs.pdf OU2 Fig.pdf

"Flask, Penny" <Penny.Flask@arcadis-us.co m>

12/13/2012 02:11 PM

To JAMES SARIC

cc Michael Berkoff, SAMUEL BORRIES, "Bucholtz, Paul (bucholtzp@michigan.gov)", "hanshues@michigan.gov", "jkeiser@ch2m.com", "Todd.Goeks@noaa.gov", "jessica.winter@noaa.gov",

"richard.gay@weyerhaeuser.com",

"martin.lebo@weyerhaeuser.com",

"khuibregtse@environcorp.com", "gtgriffi@gapac.com",

"Erickson, Michael"

bcc

Subject SRI/FS Monthly Report (November 2012)

Mr. Saric,

On behalf of Michael Erickson, please find attached the Kalamazoo River SRI/FS Monthly Report for November 2012. A hard copy will be sent via Federal Express.

Feel free to contact Mr. Erickson at 810.225.1924 or michael.erickson@arcadis-us.com if you have any questions or comments.

Thank you.

Penny Flask | Sr. Project Assistant 1 | penny.flask@arcadis-us.com

ARCADIS of New York, Inc. | 6723 Towpath Road, P.O. Box 66 | Syracuse, NY 13214-0066 T: 315 671 9131 www.arcadis-us.com

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restricted by law. B0064539_0151211100_Nov 2012_Monthly_SRIFS.pdf

JAMES SARIC/R5/USEPA/US To Janet Carlson, Nicole Wood

СС

12/17/2012 08:54 AM bcc

Subject Fw: 12/18 draft agenda

Here's the Agenda from MDEQ.

.Jim

---- Forwarded by JAMES SARIC/R5/USEPA/US on 12/17/2012 08:54 AM -----

From: "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>

To: JAMES SARIC/R5/USEPA/US@EPA, "Jeff.Keiser@CH2M.com" < Jeff.Keiser@CH2M.com>,

Cc: "King, Todd W. (KingTW@cdmsmith.com)" < KingTW@cdmsmith.com>

Date: 12/14/2012 10:38 AM Subject: 12/18 draft agenda

Jim,

Regarding next Tuesdays meeting. The following are rough agenda topics that we had in mind. We have prepared a presentation following this outline and we were hoping to go through it while having an interactive discussion. I assume you will have some details to add. We can get the details worked out on Monday. Let me know what you think.

- Tie fish tissue concentrations to PRGs and RAOs
 - Protectiveness/Receptors
 - MDCH Perspective on Fish Consumption advisories and GP Appendices
- FS needs to be a tool for decision making
 - Reach by reach evaluation
 - Range of RALs
 - Hot spots
- Consideration of MNR/Time vs. Concentration needs to be consistent with available data and useful for between alternative comparisons
- Pure terrestrial vs. aquatic impacts
- Selection of 11ppm as PRG for FP
 - Avian/terrestrial mammals
- 95% UCL

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174

<Patricia.White@CH2M.com>

12/17/2012 09:39 AM

To JAMES SARIC, Jeff.Keiser

cc Frank.Dillon, William.Andrae

bcc

Subject RE: Kazoo River Bank Repair

I finally looked through these documents. Clearly there are ongoing issues with bank stability within the former impoundments (in areas where the banks were stabilized, as well as areas where they weren't), and the mid-channel sediment prism is still present (and in fact has become vegetated in one area), probably because of ongoing low-flow conditions on the river. The post-TCRA monitoring data highlight the need for a strong monitoring component to the Area 1 remedy.

From: Saric.James@epamail.epa.gov [mailto:Saric.James@epamail.epa.gov]

Sent: Wednesday, November 14, 2012 12:02 PM

To: Keiser, Jeff/MKE

Cc: Dillon, Frank/DET; White, Patricia/BOS; Andrae, Bill/MKE

Subject: Re: Kazoo River Bank Repair

Jeff, Frank and Patty,

These attachments clarify the latest on the Plainwell and Plainwell 2 impoundments additional work. Some minor work in one area of Plainwell 2, but more significant work to be completed to stabilize the banks in Plainwell, particularly the States concerns with areas 4a, and 7b, 8b,9b, which they believe should all be rocked.

Jim

(See attached file: 11.14.12 synk to mendoza.pdf) (See attached file: MDEQ.BankMOnitoringComments10.26.2012.pdf) (See attached file: Area4A.pdf) (See attached file: Former Plainwell Impoundment and Plainwell No 2 Dam Area Proposed Repair Memo.pdf) (See attached file: EPA.2012 Bank Monitoring Report comment.pdf)

---11/14/2012 10:49:57 AM---Jim, I pulled the following from the monthly status report. Can you share

From: < Jeff.Keiser@CH2M.com>

these? I would like to mak

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: <Patricia.White@CH2M.com>, <Frank.Dillon@CH2M.com>, <William.Andrae@CH2M.com>

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On October 15, ARCADIS forwarded to USEPA the fall 2012 bank repair plan for the Former Plainwell Impoundment and Plainwell No. 2 Dam Area.

On October 15, USEPA transmitted to ARCADIS comments on the draft *Former Plainwell Impoundment* and

Plainwell No. 2 Dam Area Spring 2012 Bank Conditions Monitoring Report .

Thanks JK

Jeff Keiser Project Manager 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct – 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com

Solutions without Boundaries

JAMES SARIC/R5/USEPA/US

To Patricia.White

12/17/2012 10:20 AM

cc Frank.Dillon, Jeff.Keiser, William.Andrae

bcc

Subject RE: Kazoo River Bank Repair

I agree. The remedy for the Plainwell impoundment (as part of the Area 1 FS/PP/ROD) needs to speak to what instream and floodplain work has been and will be completed and how the channel will be maintained to prevent future erosion, which includes monitoring.

Jim

I finally looked through these document... 12/17/2012 09:40:12 AM

From: <Patricia.White@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA, <Jeff.Keiser@CH2M.com>, Cc: <Frank.Dillon@CH2M.com>, <William.Andrae@CH2M.com>

Date: 12/17/2012 09:40 AM

Subject: RE: Kazoo River Bank Repair

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Sent: Wednesday, November 14, 2012 12:02 PM

To: Keiser, Jeff/MKE

Cc: Dillon, Frank/DET; White, Patricia/BOS; Andrae, Bill/MKE

Subject: Re: Kazoo River Bank Repair

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**---11/14/2012 10:49:57 AM----Jim, I pulled the following from the monthly status report. Can you share these? I would like to mak

From: <Jeff.Keiser@CH2M.com>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: <Patricia.White@CH2M.com>, <Frank.Dillon@CH2M.com>, <William.Andrae@CH2M.com>

Date: 11/14/2012 10:49 AM Subject: Kazoo River Bank Repair

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On October 15, USEPA transmitted to ARCADIS comments on the draft *Former Plainwell Impoundment* and

Plainwell No. 2 Dam Area Spring 2012 Bank Conditions Monitoring Report .

Thanks JK

Jeff Keiser Project Manager 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct – 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893

www.jkeiser@ch2m.com Solutions without Boundaries

<Jeff.Keiser@CH2M.com>

12/17/2012 03:32 PM

To Patricia. White, Frank. Dillon, William. Andrae

cc JAMES SARIC

bcc

Subject Draft Reassessment of PCBs as the COC for the Kalamazoo

River Site

All,

FYI

Attached is a scan of GP's PowerPoint outlining the evaluation of COCs other than PCBs for the River. GP is trying to reduce or eliminate analysis for analytes other than PCBs in future field investigations on the River.

GP presented this at our meeting November 28 in Chicago. The draft TM is scheduled for some time in February for review.

If you have any questions please give me a call.

Thanks JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries



Document.pdf.pdf

<Jeff.Keiser@CH2M.com>

To JAMES SARIC 12/18/2012 05:36 PM cc Michael Berkoff

hcc

Subject FW: Willow Boulevard/A-Site Operable Unit Groundwater Monitoring Program

Jim, you mentioned you were not sure if you had received the Willow GW information. I don't see a call in number. We can try to call you at your desk or use my call in number. Let me know which you prefer.

The meeting starts at 11:00 EST.

The revised letter was attached from Barb. I copied the WB-A GMP from Fridays e-mail.

JK

Jeff Keiser **Project Manager** 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct - 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com Solutions without Boundaries

From: Shreve, Barb [mailto:Barb.Shreve@arcadis-us.com]

Sent: Tuesday, December 18, 2012 11:34 AM

To: Kristi Zakrzewski

Cc: John Bradley; Anne P. Couture; Daria W. Devantier; Steven J. Hoin; David A. Kline; Michael Berkoff

; Keiser, Jeff/MKE; Garry T. Griffith; Erickson, Michael; O'Neill, Daniel; McGuire, Pat Subject: Willow Boulevard/A-Site Operable Unit Groundwater Monitoring Program

Dear Ms. Zakrzewski,

On behalf of Pat McGuire, please find attached a letter regarding the Willow Boulevard/A-Site Operable Unit Groundwater Monitoring Program Kalamazoo, Michigan . Please note that this letter supersedes the December 14, 2012 letter submitted to you by Doug Cowin.

Please review, we look forward to discussing with you during the December 19 Stakeholders meeting. A hard copy of this letter will be sent by FedEx for delivery tomorrow.

Respectfully, Barb Shreve on behalf of Pat McGuire

Pat McGuire | Principal Env Engineer | Pat.McGuire@arcadis-us.com

ARCADIS U.S., Inc. | 6723 Towpath Rd, P.O. Box 66 | Syracuse, NY 13214

T: 315.671.9233| M: 315.420.5629

www.arcadis-us.com

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restricted by law. WBA Groundwater Monitoring Program Approach.pdfWB-A GMP Summary_12-14-12.docx.docx

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

12/19/2012 01:12 PM

To "Frank.Dillon@CH2M.com"

cc JAMES SARIC, "'Jeff.Keiser@CH2M.com'", "King, Todd W. (KingTW@cdmsmith.com)"

bcc

Subject Kennedy Paper

Frank,

Do you have a link to the Kennedy paper you mentioned yesterday, so we can review the information?

Thanks

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174

<Frank.Dillon@CH2M.com>

12/19/2012 01:15 PM

To BUCHOLTZP

cc JAMES SARIC, Jeff.Keiser, KingTW

bcc

Subject RE: Kennedy Paper

You bet. Here it is. I'll trade you for Kern's fish tissue report.

Frank

Frank S. Dillor

Principal Technologist - Ecological Risk Assessment

Environment Services Business Group

CH2M Hill

Okemos, MI 48864

Direct - 517.996.6034 Please Note new direct Line

Cell - 517-488-4901

Voice mail - 517.347.3138 ext 41520

Fax - 517.347.3793

www.ch2mhill.com

From: Bucholtz, Paul (DEQ) [mailto:BUCHOLTZP@michigan.gov]

Sent: Wednesday, December 19, 2012 2:13 PM

To: Dillon, Frank/DET

Cc: Saric.James@epamail.epa.gov; Keiser, Jeff/MKE; King, Todd W. (KingTW@cdmsmith.com)

Subject: Kennedy Paper

Frank,

Do you have a link to the Kennedy paper you mentioned yesterday, so we can review the information?

Thanks

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174



Species relative sensitivity vary by congener Manning 2012.pdf



Species relative sensitivity vary by congener Manning 2013 suppl.doc

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

>

12/19/2012 03:16 PM

To "Frank.Dillon@CH2M.com"

cc JAMES SARIC, "Jeff.Keiser@CH2M.com", "KingTW@cdmsmith.com"

bcc

Subject RE: Kennedy Paper

Got it. Thanks

Quid pro quo. I believe this is the latest version of the Kern fish trend report.

From: Frank.Dillon@CH2M.com [mailto:Frank.Dillon@CH2M.com]

Sent: Wednesday, December 19, 2012 2:16 PM

To: Bucholtz, Paul (DEQ)

Cc: Saric.James@epamail.epa.gov; Jeff.Keiser@CH2M.com; KingTW@cdmsmith.com

Subject: RE: Kennedy Paper

You bet. Here it is. I'll trade you for Kern's fish tissue report.

Frank

Frank S. Dillon

Principal Technologist - Ecological Risk Assessment

Environment Services Business Group

CH2M Hill

Okemos, MI 48864

Direct - 517.996.6034 Please Note new direct Line

Cell - 517-488-4901

Voice mail - 517.347.3138 ext 41520

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Sent: Wednesday, December 19, 2012 2:13 PM

To: Dillon, Frank/DET

Cc: Saric.James@epamail.epa.gov; Keiser, Jeff/MKE; King, Todd W. (KingTW@cdmsmith.com)

Subject: Kennedy Paper

Frank,

Do you have a link to the Kennedy paper you mentioned yesterday, so we can review the information?

Thanks

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174



DC_2_DEQ_KernFishTrend2.pdf

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

>

12/19/2012 03:25 PM

To "Frank.Dillon@CH2M.com"

cc JAMES SARIC, "Jeff.Keiser@CH2M.com", "Santini, Andrew (SantiniAD@cdmsmith.com)", "King, Todd W. (KingTW@cdmsmith.com)"

bcc

Subject FW: Dioxin

Frank,

This is the dioxin graph Drew was presenting yesterday. I thought you may be interested. (Thanks Drew)

Happy holiday's

From: Santini, Andrew [mailto:SantiniAD@cdmsmith.com]

Sent: Wednesday, December 19, 2012 4:15 PM

To: Bucholtz, Paul (DEQ) **Subject:** FW: you...

Notes

- 1. No coPCBs ran in 2001 for carp or smb, that is why the total TEQ equals the total Dioxin/Furan TEQ.
- 2. Sample counts per stations are 11, except for 2001 carp where only 2 samples with the highest PCB results were analyzed for each of the 5 stations.
- 3. 2011 dioxin/furan TEQs may be biased low. This is due to PACE laboratory flagging the most toxic isomer (2,3,7,8-tcdd) with an 'I' qualifier, which means interferent. This occurred in 32 out of 33 samples in 2011. We could take the reported Estimated Maximum Possible Concentration (EMPC), multiply it by the TEF (which is 1 for this isomer [therefore is more toxic than the others]) and see what the impact is on the total TEQ.
- 4. We should be getting TEQ results back for 11 carp at Morrow Lake soon, so we'll have 'background' concentrations to compare to. Smallmouth bass from Morrow Lake will be analyzed later in 2013 (since MDCH just got them in December).

From: Bucholtz, Paul (DEQ) [mailto:BUCHOLTZP@michigan.gov]

Sent: Wednesday, December 19, 2012 1:00 PM

To: Santini, Andrew **Subject:** you...

...send that Dioxin slide to Frank D and company?

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174



Ramon Mendoza/R5/USEPA/US

12/19/2012 08:56 PM

To "Bucholtz, Paul (DEQ)"

cc "Freiburger, Chris (DNR)", "Hanshue, Sharon (DNR)", "Mills, Mark (DNR)", "Synk, Polly (AG)"

bcc Mike Ribordy

Subject Re: GP work in Area 6B Plainwell Impoundment

Hello Paul et al: Per our call today I am sending over three photos from of 6b. Photo 6b.downstream shows the survey stick with the pink flag on the left where the rock is suppose to go to per the repair memo. I have also send over three pics from the work done in 4a. GP told me they were down in 4a and plan to be done in 6b by end of this week.











6b.upstreamview.JPG 6btoe.build.JPG 6b.downstream.JPG 4a.ends.at.5.JPG 4a.upstreamview.JPG



4adownstreamview.JPG

"Bucholtz, Paul (DEQ)" Folks, I received a call from Ga...

12/19/2012 01:07:06 PM

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov> From:

"Hanshue, Sharon (DNR)" <HanshueS@michigan.gov>, "Freiburger, Chris (DNR)" <FreiburgerC@michigan.gov>, "Mills, Mark (DNR)" <MILLSM@michigan.gov>, To:

Cc: "Synk, Polly (AG)" <SynkP@michigan.gov>, Ramon Mendoza/R5/USEPA/US@EPA

12/19/2012 01:07 PM Date:

GP work in Area 6B Plainwell Impoundment Subject:

Folks,

I received a call from Garry at GP and Ramon. GP is looking to modify the rock placement in 6B, from what is drawn in the approved plan. They were hoping to place less rock. I lack the expertise to offer any meaningful input on such field calls. Any chance we can have one of the DNR crew contact Garry to discuss design modifications? Perhaps a field visit is possible. Work is currently underway so time is of the essence.

Ramon hopes to send pictures of the work out in the next day or so. He is inclined to keep things as is, but wants our input before a he renders a final decision.

Thanks

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174

Ramon To "Griffith, Garry T." Mendoza/R5/USEPA/US

cc "BuckholtzP@michigan.gov", 12/21/2012 02:26 PM "Ej.Suardini@arcadis-us.com",

"michael.kohagen@arcadis-us.com", Mike Ribordy,

BuckholtzP

bcc

Subject Re: EPA Inspection or Repair Work at Former Plainwell

Impoundment and Plainwell Dam 2

Garry: Thanks for the update. I can meet Mike kohagen at 0900 EST at the 6B staging area on Thursday Dec. 27. That is good news on the PCB results. Please send over the PCB sampling lab results and map location of the actual samples (coordinates if possible), or you can just send me a sampling results report in January 2013.

Did you get input from the state on the 6B rock level?

Thanks, Ramon

"Griffith, Garry T." Ramon, Just wanted to update you o... 12/21/2012 01:45:47 PM

From: "Griffith, Garry T." <gtgriffi@GAPAC.com>
To: Ramon Mendoza/R5/USEPA/US@EPA,

Cc: "Ej.Suardini@arcadis-us.com" < Ej.Suardini@arcadis-us.com>,

"michael.kohagen@arcadis-us.com" <michael.kohagen@arcadis-us.com>,

"BuckholtzP@michigan.gov" <BuckholtzP@michigan.gov>

Date: 12/21/2012 01:45 PM

Subject: Re: .Former Plainwell Impoundment and Plainwell Dam 2

Ramon,

Just wanted to update you on progress of maintenance work:

Completed work at dam yesterday and move to Plainwell Dam No. 2. Working there today and expect to finish on 12/26. Will then remob back to Plainwell 6B and finish the remaining rock placement on 12/26 before demobing equipment. Remaining hand work will be completed on 12/27. Lab results from the 5 samples collected at 10B are all non detect (<0.33 mg/kg). Mike Kohagen should be available at Plainwell on Thursday AM.

Let me know if we need to talk.

Garry

Sent from my BlackBerry Wireless Handheld

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Thursday, December 20, 2012 04:27 PM

To: Griffith, Garry T.

Cc: 'Suardini, Ej' < Ej. Suardini@arcadis-us.com>; 'Kohagen, Michael'

<Michael.Kohagen@arcadis-us.com>; BuckholtzP@michigan.gov <BuckholtzP@michigan.gov>

Subject: RE: .Former Plainwell Impoundment and Plainwell Dam 2

Hello Gary, I spoke with Mike Kohagen and I am planning come out the morning of Dec. 27 till late morning to conduct oversight on the repair work progress in Plainwell IMpoundment and Plainwell Dam 2. Hopefully the weather will hold up.

Happy Holidays, Ramon

"Griffith, Garry T."
<gtgriffi@GAPAC.com>
12/21/2012 03:11 PM

To Ramon Mendoza

cc "BuckholtzP@michigan.gov", "Ej.Suardini@arcadis-us.com",

"'michael kohagen@arcadis-us.com", Mike Ribordy,

"BuckholtzP@michigan.gov"

bcc

Subject RE: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Ramon,

I talked with Mark Mills, MDNR today. He was at 6B yesterday. He appears to be ok with where we stopped with the stone, i.e. over the top of bank on to the well vegetated flat floodplain 5 feet or so. We believe the top of the rock is at or close to the 2-yr river elevation. He would prefer someone else from the state view the site. Paul is that something that could happen next week?

We plan to include the lab report for the PCB analysis with the maintenance documentation report in January.

Mike, it would be good if you could send a photo out to this group when you are over at 6B next week.

Thanks,

Garry Griffith, P.E. Georgia-Pacific LLC 734.735.0780

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Friday, December 21, 2012 3:26 PM

To: Griffith, Garry T.

Cc: 'BuckholtzP@michigan.gov'; 'Ej.Suardini@arcadis-us.com'; 'michael.kohagen@arcadis-us.com';

Ribordy.Mike@epamail.epa.gov; BuckholtzP@michigan.gov

Subject: Re: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

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Cc: "'Ej.Suardini@arcadis-us.com'" < Ej.Suardini@arcadis-us.com>, "'michael.kohagen@arcadis-us.com" <

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Sent: Thursday, December 20, 2012 04:27 PM

To: Griffith, Garry T.

Cc: 'Suardini, Ej' < <u>Ej.Suardini@arcadis-us.com</u>>; 'Kohagen, Michael' < <u>Michael.Kohagen@arcadis-us.com</u>

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Happy Holidays, Ramon

Ramon

Mendoza/R5/USEPA/US

12/28/2012 04:19 PM

To Mike Ribordy

СС

bcc

Subject Fw: Plainwell inspection 12/27/2012

Ramon C. Mendoza, On-Scene Coordinator U.S.E.P.A. Region 5 77 West Jackson Chicago, Illinois 60604 Mail Code SE-5J Office: 312-886-4314

----- Forwarded by Ramon Mendoza/R5/USEPA/US on 12/28/2012 04:19 PM -----

From: Ramon Mendoza/R5/USEPA/US
To: BucholtzP@michigan.gov,
Date: 12/28/2012 04:18 PM

Subject: Plainwell inspection 12/27/2012

Hello Paul, I inspected 6B and the Western Channel Repair Area on 12/27 morning with Mike Kohagen of Arcadis. 6B looks good to me. They stopped about 5 ft horizontally and about 6 inches below the 2 year elevation mark. The western channel bare areas are all covered too. Attached are photos:











WesterChannel.JPG Westernchannel.2.JPG 6b.eastend.JPG 6b.toe.JPG 6b.viewdownstreamfromeastend.JPG





6b.viewupstremfromwestend.JPG 6b.westend.tiedinto7b.JPG

Am on Leave next week. Back January 7.

Happy holidays

Ramon C. Mendoza, On-Scene Coordinator U.S.E.P.A. Region 5 77 West Jackson Chicago, Illinois 60604 Mail Code SE-5J Office: 312-886-4314

"Hritsuk, Eric" <Eric.Hritsuk@arcadis-us.com

12/31/2012 03:33 PM

To SAMUEL BORRIES, "Bucholtz, Paul (DEQ)", "Hanshue, Sharon (DNR)", 'Todd Goeks', JAMES SARIC, "Mills, Mark (DNR)", "Lisa_Williams@fws.gov", "Griffith, Garry T. (gtgriffi@GAPAC.com)", "Alfano, Judith (DEQ)", "Jessica.Winter@noaa.gov", Julie Sims, Ramon Mendoza cc "Erickson, Michael", "Esposito, Anthony"

bcc

Subject Former Plainwell Impoundment and Plainwell No. 2 Dam Area 2012 Bank Conditions Monitoring Report

All,

On behalf of Mike Erickson of ARCADIS, this email communicates the availability of the 2012 Bank Conditions Monitoring Report (BCMR) for the former Plainwell Impoundment and the Plainwell No. 2 Dam TCRA areas. The 2012 BCMR presents results of the annual inspections restored banks and was developed in consideration of comments received from USEPA and MDEQ on the Spring Draft 2012 BCMR and subsequent conversations. A response to those comments is also available with the 2012 BCMR. The 2012 BCMR was prepared and is being submitted on behalf of the Project Coordinator, Garry Griffith of Georgia-Pacific, LLC.

The text of the report and the response to comment documents are attached to this email. A complete PDF including the text, tables, figures, and attachments is available on the FTP site. Instructions on how to access those files is included below.

Files can be downloaded from the ARCADIS FTP site. The address of the FTP Site is: http://secureftp.arcadis-us.com/thinclient

Use these credentials:

Username: 2012_BCMR (the site will automatically add on @secureftp.arcadis-us.com – this is

necessary)

Password: 2012 BCMR

Once you have accessed the site, check the box to the left of the document name you want to view and then click on the "Download files" button. <u>Please note that you will need to use Internet Explorer to access the site.</u>

A hard copy of the report is being sent to Ramon Mendoza of USEPA.

If you have any questions concerning the attached materials or this email, please let us know.

Eric Hritsuk

Eric Hritsuk | Project Civil Engineer | eric.hritsuk@arcadis-us.com ARCADIS U.S., Inc. | 10 S. Riverside Dr., Suite 1900 | Chicago, IL, 60606 T. 312.575.3732 | F. 312.775.9322

www.arcadis-us.com

Professional Engineer - IL

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restricted by law. RTC-MDEQ-BCMR_123112.pdf 2012 P1P2 Bank Monitoring Report.pdf



RTC-USEPA-BCMR 123112.pdf

"Griffith, Garry T." <gtgriffi@GAPAC.com>

01/03/2013 10:24 AM

To Ramon Mendoza

cc "BuckholtzP@michigan.gov",

"'Ej.Suardini@arcadis-us.com'",

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"Williams, Lisa" sa_williams@fws.gov> 01/07/2013 07:51 AM To "Alfano, Judith (DEQ)", Julie Sims, Kate Barfield - NOAA Federal, Mary Lynn Taylor, Paul Bucholtz, "Polly Synk (AG)", "Sharon Hanshue", Todd Goeks, JAMES SARIC, Nicole Wood

cc bcc

Subject Kz Agency Coordination Mtg in Benton Harbor: Feb 6, MDOT

Thanks to Judie, we have a free meeting spot for our meeting on Wednesday, Feb 6, at the address below. No restaurants close by, so we'll likely need to call in an order to Jimmie John's and then have someone pick it up. Given the travel involved, I'm thinking we plan for a 10am - 3pm (EST) meeting time.

Here's the list of topics that I sent out in December:

Topics that Jim and I have discussed as ideas (not necessarily in order yet):

- Overall Superfund schedule and process for 2013*
- Area 1 moving toward settlement of all claims, preparing for negotiations*
- Otsego and Otsego City dam removal
- Needs/opportunities for Area 2 and 3 coordination*
- Update on PRP status, including allocation issues at remaining OUs given bankruptcies
- Looking ahead to other Areas, updating/review of the big timeline sheet
- Long-term O&M and monitoring, mostly as related to river OU
- Trustee update to EPA on our implementation of bankruptcy funds and our river-wide planning efforts

From Jim: *..we currently have in-house a Feasibility Study report for Area 1, the Remedial Investigation report for Area 2, the Area 3 field work is completed and that RI is due to EPA on 11/1/13, and we have a work plan for the Remedial Investigation for Area 3 (Trowbridge) as well. The preliminary plan is to complete the Record of Decision for Area 1 by 12/31/13. So, we are rapidly approaching a final decision stage for Area 1.

-Lisa

Lisa L. Williams, Ph.D. U.S. Fish and Wildlife Service 2651 Coolidge Road, Suite 101 East Lansing, MI 48823 517-351-8324

lisa williams@fws.gov

The U.S. Fish and Wildlife Service's mission is, working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

On Thu, Jan 3, 2013 at 10:32 AM, Williams, Lisa < lisa_williams@fws.gov > wrote: The Doodle poll results are in, and we miraculously have both Feb 6 and 7 available. I propose that everyone block those two days while we see if the MDOT conference room just off I-196, north of I-94 is available for either of those days.

Judie - I think Paul has probably made the arrangements here before for MDEQ-EPA meetings. Since I'm guessing the state-to-state contact helps, would you be willing to call MDOT?

Pete Pfeiffer, Manager

3880 Red Arrow Hwy., Benton Harbor, MI 49022 <u>Map</u>

Phone: 269-849-1165 Fax: 269-849-1227

thanks! -Lisa

Ramon To "Griffith, Garry T." Mendoza/R5/USEPA/US

01/07/2013 09:06 AM cc "BuckholtzP@michigan.gov", "Ej.Suardini@arcadis-us.com",

"michael.kohagen@arcadis-us.com", Mike Ribordy

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Gary, At this time, I am available for Plainwell and Dam sites on the following dates: Feb 5-8, Jan 31-Feb 1. or Feb 11-14.

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 $\label{eq:cc: "BuckholtzP@michigan.gov" < \underline{BuckholtzP@michigan.gov}, "Ej.Suardini@arcadis-us.com" < \underline{Ej.Suardini@arcadis-us.com}, \\ \end{tabular}$

"michael.kohagen@arcadis-us.com" < michael.kohagen@arcadis-us.com >, Mike Ribordy/R5/USEPA/US@EPA

Date: 01/03/2013 10:24 AM

Subject: Re: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Ramon and Paul

Just wanted to update you on maint. work at Plainwell. Rock work was completed last week. Coir log in P2 to be placement this week. I plan to be in town on Jan 9 for the Public Meeting. Let me know if you will be in town and available to tour work areas.

-	_	-	•	,									

Garry

Sent from my BlackBerry Wireless Handheld

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Friday, December 21, 2012 02:26 PM

To: Griffith, Garry T.

Cc: 'BuckholtzP@michigan.gov' < <u>BuckholtzP@michigan.gov</u>>; 'Ej.Suardini@arcadis-us.com' < <u>Ej.Suardini@arcadis-us.com</u>>; 'michael.kohagen@arcadis-us.com' < <u>michael.kohagen@arcadis-us.com</u>>; <u>Ribordy.Mike@epamail.epa.gov</u>>; <u>BuckholtzP@michigan.gov</u> < <u>BuckholtzP@michigan.gov</u>>

Subject: Re: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Garry: Thanks for the update. I can meet Mike kohagen at 0900 EST at the 6B staging area on Thursday Dec. 27. That is good news on the PCB results. Please send over the PCB sampling lab results and map location of the actual samples (coordinates if possible), or you can just send me a sampling results report in January 2013.

Did you get input from the state on the 6B rock level?

Thanks, Ramon

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Date: 12/21/2012 01:45 PM

Subject: Re: .Former Plainwell Impoundment and Plainwell Dam 2

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Mike Kohagen should be available at Plainwell on Thursday AM.

Let me know if we need to talk.

Garry

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From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Thursday, December 20, 2012 04:27 PM

To: Griffith, Garry T.

Cc: 'Suardini, Ej' < <u>Ej.Suardini@arcadis-us.com</u>>; 'Kohagen, Michael' < <u>Michael.Kohagen@arcadis-us.com</u>

>: BuckholtzP@michigan.gov <BuckholtzP@michigan.gov>

Subject: RE: .Former Plainwell Impoundment and Plainwell Dam 2

Hello Gary, I spoke with Mike Kohagen and I am planning come out the morning of Dec. 27 till late morning to conduct oversight on the repair work progress in Plainwell IMpoundment and Plainwell Dam 2. Hopefully the weather will hold up.

Happy Holidays, Ramon

"Griffith, Garry T." <gtgriffi@GAPAC.com>

01/08/2013 03:26 PM

To Ramon Mendoza

cc "BuckholtzP@michigan.gov", Mike Ribordy

bcc

Subject RE: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Paul,

Jan 31 – Feb 1 works best for me. Feb 11 could also work.

Garry Griffith, P.E. Georgia-Pacific LLC 734.735.0780

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Tuesday, January 08, 2013 11:07 AM

To: Griffith, Garry T.

Cc: 'BuckholtzP@michigan.gov'; 'Ej.Suardini@arcadis-us.com'; 'michael.kohagen@arcadis-us.com';

Ribordy.Mike@epamail.epa.gov

Subject: RE: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Gary, At this time, I am available for Plainwell and Dam sites on the following dates: Feb 5-8, Jan 31-Feb 1, or Feb 11-14.

Ramon C. Mendoza, On-Scene Coordinator U.S.E.P.A. Region 5 77 West Jackson Chicago, Illinois 60604 Mail Code SE-5J

Office: 312-886-4314

"Griffith, Garry T." ---01/07/2013 10:19:16 AM---Ramon, The week of Jan 28th would work well with my schedule. I am generally unavailable most of th

From: "Griffith, Garry T." <gtgriffi@GAPAC.com> To: Ramon Mendoza/R5/USEPA/US@EPA.

Cc: "BuckholtzP@michigan.gov" <BuckholtzP@michigan.gov>, "Ej.Suardini@arcadis-us.com" <Ej.Suardini@arcadis-us.com" <mirmichael.kohagen@arcadis-us.com" <mirmichael.kohagen@arcadis-us.com>, Mike Ribordy/R5/USEPA/US@EPA

Date: 01/07/2013 10:19 AM

Subject: RE: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Ramon,

The week of Jan 28th would work well with my schedule. I am generally unavailable most of the week before (Jan

21) and following (Feb 4). Let me know if that works for you. Paul, we can touch base on the 9th.

Garry Griffith, P.E. Georgia-Pacific LLC

734.735.0780

From: Mendoza.Ramon@epamail.epa.gov [mailto:Mendoza.Ramon@epamail.epa.gov]

Sent: Monday, January 07, 2013 10:06 AM

To: Griffith, Garry T.

Cc: 'BuckholtzP@michigan.gov'; 'Ej.Suardini@arcadis-us.com'; 'michael.kohagen@arcadis-us.com';

Ribordy.Mike@epamail.epa.gov

Subject: Re: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Gary, I will not be available to inspect the work areas. I am glad to hear that work (except for the revegetation) is coming to completion. I will be available after January 21. Please let me know if you any dates open after January 21 and we can coordinate with Paul. I am on sick leave today and can be reached at 312-802-1409.

Sincerely,

Ramon C. Mendoza. On-Scene Coordinator U.S.E.P.A. Region 5 77 West Jackson Chicago, Illinois 60604 Mail Code SE-5J

Office: 312-886-4314

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Date: 01/03/2013 10:24 AM

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Ej.Suardini@arcadis-us.com>; 'michael.kohaqen@arcadis-us.com' <michael.kohaqen@arcadis-us.com>; Ribordy, Mike@epamail.epa.gov < Ribordy, Mike@epamail.epa.gov >; BuckholtzP@michigan.gov <

BuckholtzP@michigan.gov>

Subject: Re: EPA Inspection or Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Garry: Thanks for the update. I can meet Mike kohagen at 0900 EST at the 6B staging area on Thursday Dec. 27. That is good news on the PCB results. Please send over the PCB sampling lab results and map location of the actual samples (coordinates if possible), or you can just send me a sampling results report in January 2013.

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Thanks,

Ramon

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Date: 12/21/2012 01:45 PM

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Garry

Sent from my BlackBerry Wireless Handheld

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Cc: 'Suardini, Ej' < Ej.Suardini@arcadis-us.com>; 'Kohagen, Michael' < Michael.Kohagen@arcadis-us.com

>; BuckholtzP@michigan.gov < BuckholtzP@michigan.gov>

Subject: RE: .Former Plainwell Impoundment and Plainwell Dam 2

Hello Gary, I spoke with Mike Kohagen and I am planning come out the morning of Dec. 27 till late morning to conduct oversight on the repair work progress in Plainwell IMpoundment and Plainwell Dam 2. Hopefully the weather will hold up.

Happy Holidays, Ramon

Ramon To Mike Ribordy Mendoza/R5/USEPA/US

01/09/2013 03:53 PM bcc

Subject Status of Repair Work at Former Plainwell Impoundment and Plainwell Dam 2

Mike Per your request: As of January 5, 2013,

<u>Former Plainwell Impoundment</u> - Repair work to intall rock and geotextile in eroded areas in 4A and 6B has been completed. Work to replace displaced rock from geotextile in several areas has also been completed.

СС

<u>Plainwell Dam 2</u> - Repair work to install rock and geotextile plus coir log was completed.

Vegetated areas landward of the rock repair disturbed by the repair activities will be seeded following repair by end of February 2013 (weather permitting) for both sites.

Ramon

<Jeff.Keiser@CH2M.com>

To JAMES SARIC, Michael Berkoff

01/11/2013 02:41 PM

СС bcc

Subject 1-09-2013 Public meeting

You probably have these but I thought I would follow up with a couple of the requests from the public meeting:

- 1) City asked the spending of the trust fund is transparent and what is left?
- 2) Bob Whitesides requested an electronic copy of the 5 year review
- 3) City requested costs for monitoring at any of the OUs or typical costs.
- City requested costs for performing the 5 year review
- City requested costs for Capping Willow (Jim you deferred this to Gary, I doubt he is interested in providing the costs.)

Let me know if you have questions.

JK

Jeff Keiser **Project Manager** 135 S. 84th Street, Suite 400 Milwaukee, WI 53214 Direct - 414 847-0382 e-Fax -- 414 454-8766 Mobile 414 467-4893 www.jkeiser@ch2m.com

Solutions without Boundaries

"Griffith, Garry T." <gtgriffi@GAPAC.com>

01/16/2013 01:04 PM

To JAMES SARIC, "'Paul T. Bucholtz (bucholtp@michigan.gov)", "'Jeff.Keiser@CH2M.com"

cc "P. E. Michael Erickson (michael.erickson@arcadis-us.com)"

bcc

Subject FW: Kalamazoo - January 14, 2013 Issue of DEQ

Environmental Calendar

Jim and Paul,

As I mentioned to you earlier today, the state of Michigan has a proposed a state wide TMDL for PCBs in surface water. See bottom of page 4 in the attached, as well as the DEQ website http://www.michigan.gov/waterquality (first item under "information") for the TMDL document. The way I read it, a 94% reduction in air deposition will be required for the average state water to meet the TMDL which is estimated to take 50 yrs.

The document also lists GP's Plainwell and King Highway Landfill as having current SRD discharges. We plan to provide comments that these discharges were part of removal actions/closure activities and the SRDs have been withdrawn.

Garry Griffith, P.E. Georgia-Pacific LLC 734.735.0780

From: DEQ-CALENDAR [mailto:DEQ-CALENDAR@LISTSERV.MICHIGAN.GOV] On Behalf Of Lindsay,

Barbara (DEQ)

Sent: Monday, January 14, 2013 2:21 PM

To: DEQ-CALENDAR@LISTSERV.MICHIGAN.GOV

Subject: January 14, 2013 Issue of DEQ Environmental Calendar

The DEQ Environmental Calendar for January 14, 2013, is available on the DEQ Web site at http://www.michigan.gov/deqcalendar. Attached for your information is the PDF version of that calendar.

Barbara Lindsay
Office of Environmental Assistance
Michigan Department Environmental Quality

Phone: 517-373-6655



JAMES SARIC/R5/USEPA/US

To Janet Carlson, Nicole Wood

CC

01/16/2013 01:13 PM

bcc

Subject Fw: Kalamazoo - January 14, 2013 Issue of DEQ

Environmental Calendar

FYI

---- Forwarded by JAMES SARIC/R5/USEPA/US on 01/16/2013 01:13 PM -----

From: "Griffith, Garry T." <gtgriffi@GAPAC.com>

To: JAMES SARIC/R5/USEPA/US@EPA, "Paul T. Bucholtz (bucholtp@michigan.gov)"

<bucholtp@michigan.gov>, "'Jeff.Keiser@CH2M.com" <Jeff.Keiser@CH2M.com>,

Cc: "P. E. Michael Erickson (michael.erickson@arcadis-us.com)"

<michael.erickson@arcadis-us.com>

Date: 01/16/2013 01:04 PM

Subject: FW: Kalamazoo - January 14, 2013 Issue of DEQ Environmental Calendar

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Sent: Monday, January 14, 2013 2:21 PM **To:** DEQ-CALENDAR@LISTSERV.MICHIGAN.GOV

Subject: January 14, 2013 Issue of DEQ Environmental Calendar

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Barbara Lindsay
Office of Environmental Assistance
Michigan Department Environmental Quality
Phone: 517-373-6655



deq-oea-envcalendar-011413.pdf

"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

01/18/2013 02:09 PM

To JAMES SARIC

bcc

СС

Subject SWACs

Jim,

Just so you know, Kern's estimates of SWAC are far different in some areas from the figures Arcadis put in the RI. I think we will find SWACs and Mass estimates are much more similar for Area 1 than as are being depicted. It appears to be the result of mixing biased and unbiased data sets so as to give high concentrations a lower weighting. More to come on Tuesday.

Paul Bucholtz MDEQ-RRD Superfund Section 517-373-8174

"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

01/21/2013 03:58 PM

To Paul Bucholtz

cc JAMES SARIC, "Jeff Keiser ", "Garry T. Griffith", "Andrew Santini ", "Todd King ", "Erickson, Michael", "Scoville, Michael"

bcc

Subject Kalamazoo Area 3 Database

Dear Mr. Bucholtz.

On behalf of Mike Scoville, please find attached the Kalamazoo Area 3 Database file.

This data base contains <u>Location</u>, <u>Probe</u>, <u>Field Info</u>, and <u>Lab Data</u> tables with data collected in Area 3 as part of the recent SRI sampling. This is in the same format as previous database submittals so they can be easily appended in Access. This includes all outstanding data throughout the Area 3 SRI, except our fish sampling conducted late last year, which we will send upon receipt and validation. Also please note that we are awaiting an update of the MDEQ database containing the final validated fish data (we received preliminary data from Mr. Santini last year), and available long-term surface water monitoring data from 2012

Should you any questions please contact Mike Scoville at your convenience.

Respectfully, Barb

Barb Shreve | Assistant | barb.shreve@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

D: 810.225.1981 | O: 810.229.8594

www.arcadis-us.com Sediment Assessment, Management & Remediation

Professional Affiliate / ARCADIS G&M of Michigan, LLC

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restricted by law. KZOODB_Area 3 Update_01 21 13.xlsx

<Jeff.Keiser@CH2M.com>

01/22/2013 07:38 AM

To JAMES SARIC

cc Patricia. White, Frank. Dillon, William. Andrae

bcc

Subject Kalamazoo River FS Comments

Jim, attached are our latest draft FS comments. Let me know if you have any questions or clarifications. I am sending over in WORD form without numbering so you may add EPA comments as needed. I will send over a final version once we have discussed with you and the MDEQ. If you want to add EPA comments to this list once you are done I will number the comments and resubmit as final.

Thanks

JK

Jeff Keiser
Project Manager
135 S. 84th Street, Suite 400
Milwaukee, WI 53214
Direct – 414 847-0382
e-Fax -- 414 454-8766
Mobile 414 467-4893
www.jkeiser@ch2m.com
Solutions without Boundaries



Predraft_Area_1_FS_comments_CH2MHILL docx_rev3_01-22-2013.docx

Milt Clark <mclark-59@comcast.net> 01/22/2013 07:49 PM

To JAMES SARIC, "Paul (DEQ) Bucholtz", "Todd W. King"

cc Jeff.Keiser, Patricia.White, James Lavelle, Andrew Santini, "John (DEQ) Bradley", Eric Blischke, Frank.Dillon, "Paul (DEQ) Bucholtz", Tony Gendusa, John Kern

bcc

Subject Area 1 RAO MInor Revisions

Jim, Patty, et al,

I think our mutual approach is correct, focusing upon the RME for bass (SMB) fishers and a sediment target for each reach. Sediment targets needed to protect the mixed diet RME consumer eating SMB and carp would be challenging. Having said that, since MDCH's survey of 900 Kalamazoo fish consumers found a high intake (24%) of carp, we should compare all potential alternatives (e.g., sed RALs) to the level of protection afforded to all known fish consuming populations.

I made just a few small changes to the RAO below to avoid confusion with GP.

At the Benton Harbor meeting I proposed a target of 0.20 ppm for SMB, giving a meal per week under MCDH's advisory system. However, I did not provide the meal per week range, which is 0.06 to 0.20 ppm. To be accurate, I would modify the RAO below to reflect the meal per week range used by MCDH. This range also includes the SMB tissue target of 0.07 ppm derived from the non-cancer HI of 1.0 (immunotoxicity RfD). We would want to place emphasis on the immunotoxicity RfD endpoint, which is 3.5 times lower than the reproductive RfD. An HI of 1.0 for the reproductive endpoint yields a meal per month consumption value of 0.25 ppm.

Also to be clear, we probably don't want to imply an explicit 1 x 10-5 cancer target for the 10 year goal, since that yields 0.04 ppm in SMB, which is for unlimited consumption (0.05 ppm) under the MDCH advisory system. A 0.20 ppm tissue target in SMB yields a 4.7E-5 cancer risk. Specifying a cancer risk less than 5E-5 for a 10 year SMB target would avoid confusion. Below are minor edits to RAO 1.

It would also be valuable to include 30 year goals of 0.04 ppm for SMB (1.0 E-5) and possibly 0.20 ppm for carp. A 30 year goal for unlimited consumption of walleye was specified in the Fox River FS and ROD. We can discuss the merit of 30 year goals further as a group.

•RAO 1: Protect humans who consume Kalamazoo River fish from exposure to PCBs that exceed protective levels. The RAO is

expected to be progressively achieved over time by meeting the following targets for sediment and fish tissue:

-Sediment Target

•A SWAC of 0.33 mg/kg in each of the eight segments within Area 1 of the Kalamazoo River within 10 years following remedy implementation

-Fish Tissue Targets

•A reduction in the fish advisory level for smallmouth bass to one meal per week (0.06 to 0.2 mg/kg)
•Achievement of a non-cancer Hazard Index (HI) of 1.0 (immunotoxicity RfD) and a cancer risk less than 5 x10⁻⁵ for the high end sport angler (100% bass diet) within 10 years following remedy implementation

•RAO 4: Reduce the transport of PCBs from Area 1 to downstream areas and Lake Michigan. Including transport of PCBs from riverbank and floodplain soils to the Kalamazoo River.

This RAO is intended to reduce the rate of transport of PCBs from Area 1 to downstream areas of the Kalamazoo River and Lake Michigan.

"Erickson, Michael" <Michael.Erickson@arcadis-u s.com>

01/23/2013 09:21 AM

To "Bucholtz, Paul (DEQ)", "King, Todd W."

cc "Griffith, Garry T.", JAMES SARIC,
"Jeff.Keiser@CH2M.com", "Santini, Andrew", "John Kern
(jkern@KernStat.com)"

bcc

Subject RE: GIS layer or table request

Paul.

What we will be providing is a spreadsheet that provides the SWAC calculation for Area 1. There was no stream tube GIS layer created. The stream tube length and width dimensions are specified in the spreadsheet. The calculations are presented in the appendix of the report, but we will send the excel sheet so the calculations can be reviewed.

-Mike

From: Bucholtz, Paul (DEQ) [mailto:BUCHOLTZP@michigan.gov]

Sent: Wednesday, January 23, 2013 9:59 AM

To: Erickson, Michael; 'King, Todd W.'

Cc: Griffith, Garry T.; Jim Saric (saric.james@epa.gov); Jeff.Keiser@CH2M.com; Santini, Andrew; John

Kern (jkern@KernStat.com)

Subject: RE: GIS layer or table request

Mike,

Can you give me a hard time on the "soon". This issues is beginning to affect our ability to provide a timely response on comments.

Thanks

From: Erickson, Michael [mailto:Michael.Erickson@arcadis-us.com]

Sent: Wednesday, January 16, 2013 5:44 PM **To:** Bucholtz, Paul (DEQ); 'King, Todd W.'

Cc: Griffith, Garry T.; Jim Saric (saric.james@epa.gov); Jeff.Keiser@CH2M.com; Santini, Andrew; John

Kern (ikern@KernStat.com)

Subject: RE: GIS layer or table request

Yes Paul, I haven't forgot about your request. We will get the information to you relatively soon. Regards,

Mike

Michael J. Erickson, PE (MI) | Vice President | michael.erickson@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116

T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044

www.arcadis-us.com

Professional Affiliate | ARCADIS G&M of Michigan, LLC

From: Bucholtz, Paul (DEQ) [mailto:BUCHOLTZP@michigan.gov]

Sent: Wednesday, January 16, 2013 2:30 PM

To: 'King, Todd W.'; Erickson, Michael

Cc: Griffith, Garry T.; Jim Saric (saric.james@epa.gov); Jeff.Keiser@CH2M.com; Santini, Andrew; John

Kern (jkern@KernStat.com)

Subject: RE: GIS layer or table request

Mike, can we get a response on this request? At this point, we need this information sooner rather than later.

Thanks

From: King, Todd W. [mailto:KingTW@cdmsmith.com]

Sent: Tuesday, January 08, 2013 3:40 PM

To: Michael J. Erickson (<u>michael.erickson@arcadis-us.com</u>)

Cc: Griffith, Garry T.; Jim Saric (saric.james@epa.gov); Jeff.Keiser@CH2M.com; Bucholtz, Paul (DEQ);

Santini, Andrew; John Kern (<u>jkern@KernStat.com</u>)

Subject: GIS layer or table request

Mike-

We would like to get the stream tube GIS layer and/or table electronically to make sure we (or more specifically John Kern) can reproduce your SWAC calcs for instream sediment.

Would that be possible? For full river?

Thanks,

Todd

Todd W. King, P.E., BCEE, LEED AP CDM Smith

1 Woodward Ave, Suite 1500

Detroit MI 48226

p/f: (313) 230-5648

c: (313) 670-6020

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JAMES SARIC/R5/USEPA/US

To Milt Clark

01/23/2013 09:55 AM

cc Eric Blischke, "John (DEQ) Bradley", "Paul (DEQ) Bucholtz", Frank.Dillon, Tony Gendusa, Jeff.Keiser, John Kern, "Todd W. King", James Lavelle, Patricia.White, Andrew Santini

bcc

Subject Re: Area FS Comments

Paul:

Based upon our call yesterday, here's a recap of what I need.

First in terms of comments.

- 1. A concise comment describing the need to include lipid based concentrations for fish and how that shows a decrease in decay rate. (This could be two comments)
- 2. A discussion of the problem with the SWAC calculations and a proposed alternative approach (es)
- 3. Given the SWAC and lipid discrepancies as noted above we should have the PRPs add sediment remedies for River sections 2, 3 and 4 (since the other areas have lower SWACs and we believe this is where the majority of the mass also exists) including removal to RALs of 2, 5 and 10. (We would need volumes and costs for each along with the decay curves.) If you believe that 2, 5 and 10 provide the same answer it may be more appropriate to reduce the number of RALs.

For further internal discussion.

A. Given the slower decay curves produced by John K. I would like to see where the various sediment remedies proposed by GP fall along the time curve and how they impact fish tissue concentration over time. (This issue speaks to the time interval used in RAO 1). I want to make sure the 10 year time frame is appropriate.

I'll need all of this by 1/29 of next week.

thanks Jim

Milt Clark <mclark-59@comcast.net> 01/23/2013 11:23 AM To JAMES SARIC

cc Eric Blischke, "John (DEQ) Bradley", "Paul (DEQ) Bucholtz", Frank.Dillon, Tony Gendusa, Jeff.Keiser, John Kern, "Todd W. King", James Lavelle, Patricia.White, Andrew Santini

bcc

Subject Re: Area 1 RAO MInor Revisions

Jim,

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Having both a short term long (e.g.,10 year) and long term goal (30 year) might be a reasonable way to go. A short term goal was developed for the Fox to maximize near term risk reduction results and then permit MNR to achieve lower fish tissue targets in the future.

Milt

On Jan 23, 2013, at 9:15 AM, Saric James@epamail.epa.gov wrote:

Milt,

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Milt Clark ---01/22/2013 07:51:19 PM---Jim, Patty, et al, I think our mutual approach is correct, focusing upon the RME for bass (SMB) fish

From: Milt Clark < mclark-59@comcast.net >

To: JAMES SARIC/R5/USEPA/US@EPA, "Paul (DEQ) Bucholtz" < <u>BUCHOLTZP@michigan.gov</u>>, "Todd W. King" < <u>KingTW@cdmsmith.com</u>>,

Cc: Jeff.Keiser@CH2M.com, Patricia.White@CH2M.com, James Lavelle <<u>LavelleJM@cdmsmith.com</u>>, Andrew Santini < SantiniAD@cdmsmith.com>, "John (DEQ) Bradley" <<u>BRADLEYJ1@michigan.gov</u>>, Eric Blischke

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Date: 01/22/2013 07:51 PM

Subject: Area 1 RAO MInor Revisions

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This RAO is intended to reduce the rate of transport of PCBs from Area 1 to downstream areas of the Kalamazoo River and Lake Michigan.

Milt Clark <mclark-59@comcast.net> 01/24/2013 04:15 PM To JAMES SARIC

cc "Paul (MDEQ) Bucholtz", "Todd W. King"

bcc

Subject Fwd: Area 1 RAO MInor Revisions

Jim,

A later MDCH document gives the meal per week range as 0.05 to 0.20, not 0.06 to 0.20 as I stated. A small detail, but might as well be accurate.

Milt

Begin forwarded message:

From: Milt Clark < mclark-59@comcast.net > Date: January 23, 2013 11:23:23 AM CST

To: Saric.James@epamail.epa.gov

Cc: Eric Blischke < blischkee@cdmsmith.com</td>
 , "John (DEQ) Bradley" < BRADLEYJ1@michigan.gov</td>
 , "Paul (DEQ) Bucholtz" < BUCHOLTZP@michigan.gov</td>
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jkern@kernstat.com> Date: 01/22/2013 07:51 PM

Subject: Area 1 RAO MInor Revisions

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"Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov

01/25/2013 03:49 PM

To JAMES SARIC

CC hcc

Subject RE: Area 1 RAO MInor Revisions

Jim,

As I review this language and consider how we communicate our goals for the river, I am becoming more troubled by the 0.33 sediment value. It has no meaning in the context of a risk discussion, and has little meaning when compared to the relatively technical discussion of "risk goals" like the Fish tissue, cancer risk, and hazard index. I really think our sediment number should be tied to one of the other goals for consistency. I know you hold a different opinion, but I am more troubled by this detail as I think in the context of our goals. From that perspective I think a sediment goal of 0.2 would work best (which is the 10-5 all bass diet for the high end sport angler and HI – 1 for the mixed diet high end sport angler). Alternatively 0.3 (mixed diet for the CTE sport angler) or 0.34 (which is the HI-1 for the bass only diet for the high end sport angler) would be better alternatives that the 0.33. I trust we will be discussing in more detail.

Thanks

From: Milt Clark [mailto:mclark-59@comcast.net] Sent: Thursday, January 24, 2013 5:15 PM

To: JAMES SARIC

Cc: Bucholtz, Paul (DEQ); Todd W. King **Subject:** Fwd: Area 1 RAO MInor Revisions

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Cc: Eric Blischke <bli>chkee@cdmsmith.com>, "John (DEQ) Bradley" <

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Date: 01/22/2013 07:51 PM Subject: Area 1 RAO MInor Revisions Jim, Patty, et al,

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Milt Clark <mclark-59@comcast.net> 01/27/2013 08:08 PM

To JAMES SARIC

cc "Paul (MDEQ) Bucholtz", "Todd W. King"

bcc

Subject Some RAO Details

Jim,

With the completion of John Kern's work, perhaps we can have a brief discussion on Tuesday of adding a long-term RAO (e.g, 30 years), to our short-term RAOs (which we might be defining as post remedial sediment target and 10 year SMB, 0.05 to 0.20 ppm). We did have both short-term and long-term RAOs for the Fox and the approach seems reasonable.

While Tittabawasee RAOs may not have not as yet been developed (or the thinking may be evolving), the 2009 SOW below does mention time, risk based RAOs.

Note also that the SOW does include a bank/floodplain RAO, which probably would be of benefit for the Kalamazoo. Possible language might be:

RAO 5: Reduce transport of PCBs from river bank and flood plain soils to the Kalamazoo River. This RAO is intended to reduce the rate of transport of PCBs from river bank and flood plain soils to Kalamazoo River sediments at levels that pose risk to human health or the environment.

Thanks,

Milt

Segment-Specific Post-Construction Residual Risk Assessment

The Respondent shall conduct a human health and ecological risk assessment based on post-construction and/or Site-wide Monitoring (Task 4) data in accordance with the requirements of SOWSectionVII1.D. In order for response efforts at a particular segment to be considered complete, the residual risk analysis shall demonstrate that residual human health and ecological risk falls within ranges considered by EPA, in consultation with MDEQ, to be acceptable.

If EPA, in consultation with MDEQ, determines:

The residual risk analysis for both short-term RAOs and long-term RAOs demonstrates 'that residual human health and ecological risk falls within an acceptable risk range, then the response efforts at that particular segment (excluding ongoing operation, monitoring and maintenance) will be considered complete, pending a final OU 1 ROD.

The residual risk analysis for short-term RAOs demonstrates that residual human health and ecological risk falls within an acceptable risk range, but that the residual risk analysis for long-term RAOs demonstrates that residual human health and/or ecological risk does not fall within an acceptable risk range, then the Respondent shall:

Conduct an analysis assessing whether residual contaminant levels in sediments, banks, and/or floodplain soils are likely to result in acceptable risk for the long-term RAOs in a reasonable period of time (e.g, predict future fish levels by use of site-specific BSAFs, predictive modeling, etc.);

To the extent possible, and given the uncertainties about response decisions in other segments, predict the time until the long-term RAOs may be attained; Continue monitoring in accordance with approved plans; and Submit a Multi-Segment, OU-Wide, and/or Site-Wide Post-Construction Risk Assessment in accordance with

sub-task 10.3.

The residual risk analysis for short-term RAOs demonstrates that the residual risk does fall within an acceptable risk range, then the Respondent shall submit a new Segment-Specific Response Proposal that addresses sub-tasks 8.3 and 8.4 and a new RD pursuant to Task 9, in accordance with the Schedule in Exhibit B of this SOW.

"King, Todd W." <KingTW@cdmsmith.com>

01/29/2013 01:29 PM

To JAMES SARIC, "Patricia.White@CH2M.com",

"frank.dillon@ch2m.com", "Jeff.Keiser@CH2M.com"

CC "Bucholtz, Paul (MDEQ)", "John Kern
(jkern@KernStat.com)", Milt Clark, "Gendusa, Tony",
"Lavelle, James", "Santini, Andrew", "Bradley, John (DEQ)", "Blischke, Eric"

bcc

Subject For discussion. DRAFT

Your message is ready to be sent with the following file or link attachments:

MDEQ Comments on Area 1FS v20130129.docx MDEQ Response to EPA Request RE Area 1FS v20130129.docx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.



MDEQ Comments on Area 1FS v20130129.docxMDEQ Response to EPA Request RE Area 1FS v20130129.docx



FishTrendGraphs_Remedial Options.pdf

"Bradley, John (DEQ)" <BRADLEYJ1@michigan.gov >

01/31/2013 12:24 PM

To JAMES SARIC

cc "Bucholtz, Paul (DEQ)", "Santini, Andrew (SantiniAD@cdmsmith.com)", "Jeff.Keiser@CH2M.com", "King, Todd W. (KingTW@cdmsmith.com)"

bcc

Subject API/PC/KR Area 1 FS Comments

Jim

I am forwarding this communication (including the attachments) on behalf of Paul Bucholtz as API/PC/KR Area 1 Draft FS comments. Paul is currently out of the office.

Recent communications between the agencies have concluded that the sectioning of Area 1 needs to improve upon that currently used to develop the draft FS. Critical comments on the RI and draft FS often relate to the uncertainty in site data, and the inability of the data set (and/or the manner in which it has been presented) to adequately support that proposed within the FS (e.g., section wide SWACs, mass estimates, and remedial options cost estimates). This problem can be addressed by improving the manner in which site data is grouped and processed. A functional understanding of a large highly heterogeneous area such as Area 1 can benefit from a discerning of populations at a practical scale, and the characterization of a representative subset of the populations. The development of populations in Area 1 begins with a practical sectioning of the river.

The MDEQ in cooperation with CDM has begun this process. The attached (Figures 1-8) represent an improved sectioning of upper Area 1 (upstream of D Ave.) based on river slope. Surface water elevations were obtained (GPS Trimble R8 RTK capability with a TSC2 controller) and arbitrarily categorized as low, moderate, and high. River slopes generally correlate to river "energy". River sections colored red represent the areas of relative low average energy. The same areas likely represent a greater historical deposition of fines. The areas defining populations of concentrated contamination will be further refined using several parameters including elevation of surface water (slope), vertical resolution (and error) of elevation data, difference between high and low flow slope, geomorphology, soft sediment, sediment type, velocity, bathymetry, presence of low banks, floodplain width, and distance from source(s). The same areas can also be used to develop a performance monitoring program.

This process will be completed for Area 1 downstream of D Ave. after the weather permits additional data collection activities. Additional supporting information including the graphed profile data and specific methodology will also be made available.

Please contact Paul or myself for any additional information.

John Bradley
Senior Geologist
Michigan Department of Environmental Quality
Remediation and Redevelopment Division / Superfund Section
bradleyj1@michigan.gov (517) 335-3146



JAMES SARIC/R5/USEPA/US

To "Bradley, John (DEQ)"

01/31/2013 01:56 PM

cc "Bucholtz, Paul (DEQ)", "Jeff.Keiser@CH2M.com", "King, Todd W. (KingTW@cdmsmith.com)", "Santini, Andrew (SantiniAD@cdmsmith.com)"

bcc

Subject Re: API/PC/KR Area 1 FS Comments

John,

Thanks for the maps. I am not sure they really inform us of anything else that we don't already know at this point. Certainly you would expect low or moderate slope areas to be the highest deposition areas. Although from that maps that clearly isn't always the case. This approach may be helpful in future downriver investigations, however, considering where we are in the FS process for Area 1, I am not sure of the immediate benefit. This information might be helpful in RD/RA work, but I am not sure at this point.

thanks Jim

"Bradley, John (DEQ)" Jim I am forwarding this commu... 01/31/2013 12:26:58 PM

From: "Bradley, John (DEQ)" <BRADLEYJ1@michigan.gov>

To: JAMES SARIC/R5/USEPA/US@EPA,

Cc: "Bucholtz, Paul (DEQ)" <BUCHOLTZP@michigan.gov>, "Santini, Andrew

(SantiniAD@cdmsmith.com)" <SantiniAD@cdmsmith.com>, "Jeff.Keiser@CH2M.com"

<Jeff.Keiser@CH2M.com>, "King, Todd W. (KingTW@cdmsmith.com)"

<KingTW@cdmsmith.com> 01/31/2013 12:26 PM

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Date:

I am forwarding this communication (including the attachments) on behalf of Paul Bucholtz as API/PC/KR Area 1 Draft FS comments. Paul is currently out of the office.

Recent communications between the agencies have concluded that the sectioning of Area 1 needs to improve upon that currently used to develop the draft FS. Critical comments on the RI and draft FS often relate to the uncertainty in site data, and the inability of the data set (and/or the manner in which it has been presented) to adequately support that proposed within the FS (e.g., section wide SWACs, mass estimates, and remedial options cost estimates). This problem can be addressed by improving the manner in which site data is grouped and processed. A functional understanding of a large highly heterogeneous area such as Area 1 can benefit from a discerning of populations at a practical scale, and the characterization of a representative subset of the populations. The development of populations in Area 1 begins with a practical sectioning of the river.

The MDEQ in cooperation with CDM has begun this process. The attached (Figures 1-8) represent an improved sectioning of upper Area 1 (upstream of D Ave.) based on river slope. Surface water elevations were obtained (GPS Trimble R8 RTK capability with a TSC2 controller) and arbitrarily categorized as low, moderate, and high. River slopes generally correlate to river "energy". River sections colored red represent the areas of relative low average energy. The same areas likely represent

a greater historical deposition of fines. The areas defining populations of concentrated contamination will be further refined using several parameters including elevation of surface water (slope), vertical resolution (and error) of elevation data, difference between high and low flow slope, geomorphology, soft sediment, sediment type, velocity, bathymetry, presence of low banks, floodplain width, and distance from source(s). The same areas can also be used to develop a performance monitoring program.

This process will be completed for Area 1 downstream of D Ave. after the weather permits additional data collection activities. Additional supporting information including the graphed profile data and specific methodology will also be made available.

Please contact Paul or myself for any additional information.

John Bradley
Senior Geologist
Michigan Department of Environmental Quality
Remediation and Redevelopment Division / Superfund Section
bradleyj1@michigan.gov (517) 335-3146
[attachment "SlopeSections_DraftFinal_LowRes.pdf" deleted by JAMES SARIC/R5/USEPA/US]

Nicole Wood /R5/USEPA/US

To Michael Berkoff
02/01/2013 03:51 PM

cc Janet Carlson

bcc

Subject Fw: Lyondell Kalamzoo Site

Was the FS ever finalized?

Nicole Wood-Chi Associate Regional Counsel U.S. EPA Region 5 77 W. Jackson Blvd. C-14J Chicago, IL 60604 312-886-0664

---- Forwarded by Nicole Wood/R5/USEPA/US on 02/01/2013 03:49 PM -----

To: David Smith-Watts/DC/USEPA/US@EPA,

Cc: Nicole Wood/R5/USEPA/US@EPA, Andrew Steinberg <andrew.steinberg@lepetomaneinc.com>,

"Tanya O'Neill toneill@foley.com" <toneill@foley.com>

Date: 02/01/2013 03:24 PM Subject: Lyondell Kalamzoo Site

David:

Consistent with our recent call, I called Nicole and indicated that the Trust would be hiring an environmental consultant to assist it with the FS and related matters.

Andy will be sending Nicole and you the 2013 Kalamazoo Budget in the next couple of weeks.

I have asked Nicole to email me the draft FS and I will forward a copy to you.

Thanks.

Jay A. Steinberg, not individually, but solely as President of the Environmental Trust Trustee 35 East Wacker Drive - Suite 1550 Chicago, Illinois 60601 Phone: (312)505-2688

John Kern <jkern@kernstat.com>

02/07/2013 11:01 PM

To "Erickson, Michael", Paul Bucholtz, JAMES SARIC, "Frank.Dillon@CH2M.com", "Patricia.White@CH2M.com"

bcc

Subject Battelle Slides

Mike,

Here are the slides from my talk today. note the animations don't work roperly in the pdf, so I am also forwrding a link to the pptx file which is about 35M in size.

John

John W. Kern, PhD Kern Statistical Services, Inc. 5175 NE River Rd. Sauk Rapids, MN 56379 T: 320.281.0676 C: 509.432.6400



"Shreve, Barb" <Barb.Shreve@arcadis-us.co m>

02/11/2013 10:17 AM

To JAMES SARIC

cc "Jeff Keiser ", Paul Bucholtz, "Garry T. Griffith", "Erickson, Michael"

bcc

Subject Draft data map figures for discussion | Area 3 SRI Report Development

Dear Mr. Saric,

On behalf of Mike Erickson, attached are several data map figures presenting draft PCB results for sediment and soil samples available in Area 3 for use in the SRI report development. These maps are provided for discussion at your upcoming meetings on February 20/21. Additional information will also be distributed prior to the meeting.

Please contact Mike Erickson if you have any questions concerning these figures.

Respectfully, Barb Shreve on behalf of Mike Erickson

Michael J. Erickson, PE (MI) | Vice President | <u>michael.erickson@arcadis-us.com</u> ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116 T. 810.229.8594| D. 810.225.1924 | F. 810.229.8837 | M. 734.604.7044 <u>www.arcadis-us.com</u>

Professional Affiliate | ARCADIS G&M of Michigan, LLC

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restricted by law. Area 3 Data Figures_DRAFT_020913.pdf

JAMES SARIC/R5/USEPA/US To "Griffith, Garry T."

CC

02/13/2013 09:14 AM bcc

Subject Re: GLNPO ANNOUNCEMENT

Garry,

I guess there was no announcement or at least nothing reported from anyone regarding this. I think GLNPO and MDEQ are still working on the details of how GLNPO is going to further review the design. I do know GLNPO has committed to funding this additional design work. However, it's MDEQ's call how and when they want to make this public announcement. EPA told them it was okay to make the public aware of this. I just am not sure what MDEQ's plans are for reporting on this.

Jim

"Griffith, Garry T." Jim, I have not seen any word of the... 02/13/2013 05:16:59 AM

From: "Griffith, Garry T." <gtgriffi@GAPAC.com>
To: JAMES SARIC/R5/USEPA/US@EPA,

Date: 02/13/2013 05:16 AM Subject: GLNPO ANNOUNCEMENT

Jim,

I have not seen any word of the Area 2 and 3 dam removal announcement you mentioned to me last week. Was the announcement made on Monday? If so, is there anything you can pass to me today? If not, what is the status?

thanks

Garry Griffith, P.E. Georgia-Pacific LLC 734.735.0780 (mobile)

John Kern <kernstat@gmail.com>

02/14/2013 03:45 PM

To John Canar, JAMES SARIC, kingtw, "Bucholtz, Paul (DNRE)"

CC bcc

Subject A little leisure reading on the SWAC / biased / unbiased issues--and some arm-twisting

These are some of the simulation studies I've conducted for looking at the effects of step-outs and other biased sampling approaches on estimation of SWAC. I'm not trying to twist your arm (OK, I guess I am), but just wanted to let you know some of the things I've looked at over the years in general and how I'm looking at Kazoo in particular.

Note the giant contrast in sample intensity at Duwamish, relative to Kalamazoo. Also, note that Kalamazoo is unique in actually having several sets of unbiased data to work with. Most sites have none, so they are forced to wrestle with the biased data in the absence of alternatives.

Also John, I would point to your work at the Fox, where when you wanted the best answer you used a stratified design with unbiased sampling on a regular grid (strat-random?) within stratum. Kazoo has no such stratum boundaries to work with, but unbiasedness in the sampling design is still needed to insure accuracy of the estimate.

I (and a lot of famous statisticians) argue that the initial unbiased design-based estimate is valid and that following up after looking at the data is invalid. So when the step-outs result in an order of magnitude difference from the initial design, one needs to think carefully about why that is?

The attached poster from Battelle shows that the unbiased systematic sampling design coupled with arithmetic average of the resulting data provides estimates that are 1) most accurate and 2) least variable. this is exactly what the mathematical statistics theory says--the mean of an unbiased design is the minimum variance unbiased estimator of the population mean. I'm just simulating the known theoretical result. Note that adding 20% biased data near hotspots decreases accuracy and increases variability, even when Natural neighbor or Thiessen polygons are used to weight the samples. Again consistent with the mathematical statistical theory.

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Last item: I have a lengthy document looking at trends / SWAC etc that you should get within a couple of days with lots of details. Maybe Jim has a draft of that now.

OK, I'm done arm twisting....Talk to you soon, Kern

John W. Kern PhD Kern Statistical Services, Inc. 5175 NE River RD Sauk Rapids, MN 56379 T: 320-281-0676





C: 509-432-6400 Duwamish_final_fs_appH_103112 (1).pdf BattelleSWACposter01312009.pdf

John Kern <jkern@kernstat.com> 02/14/2013 05:10 PM To JAMES SARIC

cc John Kern, "Bucholtz, Paul (DNRE)", John Canar, kingtw

bcc

Subject Re: A little leisure reading on the SWAC / biased / unbiased issues--and some arm-twisting--Sorry for responding--I'll quit

My responses inserted below: I understand the concern over a knee-jerk reaction and would argue strenuously against such. The confidence limits on my SWACs may be encouraging in that light. Note LCLs are low, but also UCLs are high. See table at the bottom. That is important and reveals the level of uncertainty in our current position. This could easily lead to a wait and see response. I am not arguing in what follows but just providing clarification and hopefully useful input.

My overall position is to promote an approach that is technically sound and leads to improved sampling and design moving forward. If we slide into methods that cannot be traced to sound scientific published literature we are doomed.

On 2/14/2013 4:21 PM, Saric.James@epamail.epa.gov wrote:

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Yes, I know there is a difference in sampling for nature and extent of depositional features vs. SWAC for a section of a river. However, only looking at unbiased sampling would miss those features and could potentially under/over estimate sediment concentrations depending upon sampling location. I think you have to have some "weighting" to these features and recognition that the depositional features in these sections of the river do hold the bulk of the contamination based upon existing sampling data.

I agree that we incorporate geomorphology, but in a technically defensible way. The statistical literature and my coursework is loaded with how best to stratify a sampling design. The first item that is necessary is an accurate delineation of stratum boundaries. This would be a map of soft sediment deposits and geomorphic features in Area 1. This is called the sampling frame. Without an understanding of the areas of the strata, it is impossible to expand stratified estimates up to the full river.

My argument is that 1) it is unnecessary to use geomorphology or biased data to estimate SWAC, and 2) it is invlalid to create the geomorphic stratum boundaries based on analytical data. They need to independently map geomorphic features up front, or at least without looking at the data, followed by unbiased sampling within them. This can be done correctly going forward down river if they want to invest in mapping geomorphic strata. Seems they are into this for floodplain, but not instream thus far.

The problem with their current approach is that they are formulating the story to match the data. This is a known problem called post-stratification and leads to biased estimates. I'm not saying it's devious--just not defensible. I would also point out that this approach is used at almost every site--but there are few sites that have met with success--Some juustify the approach based on consistency, but I would discard the approach based on 1) lack of technical valididty and 2) a poor track record for acurately estimating mass and volume and cost at almost every site. See Palermo paper on cost/volume creep at superfund sites).

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So in Area 1 the geomorphology should be used to guide remedial design and any other question of "where is the material most likely found". Contaminating the representativeness of the original data with biased follow-ups will lead to inaccuracies.

Anecdotal info: There are "hot samples" that are not in the identified features that have also been surrounded by step-outs and effectively "remediated" with pencil led.

So, you guys figure out how to best calculate SWACs. At the end of the day comparing SWACS from .3 to 3.0 really doesn't mean that much, at least that's my perspective.

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I agree this knee-jerk business is a problem, but I think the risk of this is smaller than the problems coming on the rest of the river if the Area-1 GP methods become a template for the rest of the river.

Yet, in Portage Creek, post remedy our SWAC is 1.7, and we believe that's fine. I'll end with this. The RI is done and approved. We have to make a remedy selection based upon the existing data, and not future data collection. So, if there is a lack of data in some areas, we have to make the best decision from what we have.

I agree with this and I don't think GP needs to understate the current condition to justify a decision that is reasonable.

Table 5.2-1. Total PCB Concentration in surficial sediments.											
Supplemental FS			MDEQ Analysis Unbiased Samples (1993-1994)								
		Stream Tube		Ц		Unbiased Samples (1993-1994)					
SRI Reach		N	SWAC (mg/kg)		Sample Count	SWAC (mg/kg)	LCL 95	UCL 95	Thiessen Poly SWAC (mg/kg)		N
Morrow Dam to King Highway	1	85	0.072		80	0.19	0.10	0.41	0.12		97
King Hwy to Portage Creek	2	29	0.26		41	2.41	0.18	10.63	4.42		66
Portage Creek to Mosel Ave	3	30	0.35		17	2.91	0.30	13.18	4.95		50
Mosel Ave to D-Ave	4	130	0.43		81	1.24	0.34	4.64	4.66		139
D-Ave to RR Bridge	5	110	0.31		65	0.42	0.25	0.77	0.67		89
RR Bridge to Plainwell No 2.	6	24	1.1		9	0.24	0.09	0.47	0.45		18
Plainwell No2. to Main Street Plainwell	7	39	0.96		8	0.78	0.18	2.46	1.39		52

-----John Kern <kernstat@gmail.com> wrote: -----

To: John Canar/R5/USEPA/US@EPA, JAMES SARIC/R5/USEPA/US@EPA, kingtw <a href="mailto: <a href="mailto:KingTW@cdms

From: John Kern <kernstat@gmail.com>

Date: 02/14/2013 03:45PM

Subject: A little leisure reading on the SWAC / biased / unbiased issues--and some

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T: 320-281-0676

C: 509-432-6400

[attachment "Duwamish_final_fs_appH_103112 (1).pdf" removed by JAMES SARIC/R5/USEPA/US]
[attachment "BattelleSWACposter01312009.pdf" removed by JAMES SARIC/R5/USEPA/US]

John Kern <jkern@kernstat.com> 02/14/2013 05:46 PM To JAMES SARIC

cc "Bucholtz, Paul (DNRE)", John Canar, John Kern, kingtw, Jeff.Keiser

bcc

Subject Re: A little leisure reading on the SWAC / biased / unbiased issues--and some arm-twisting--Sorry for responding--I'll quit

I'm with you on Bathymetry as a potential way to stratify because it provides a full map of the river of the stratification variable. That said we need to test the hypothesis that the bathy is predictive of PCB concentration and then incorporate into estimates. That is what we did with the Bradley study and found correlation between previous channels etc. (Recall the 3 hour WEBEX I presented) a while back. This could be a way forward if we can verify the connection reliably, but we will need collaboration to get there.

Standard statistical methods are available.

On 2/14/2013 5:32 PM, Saric.James@epamail.epa.gov wrote:

I think your statements are accurate, but I still disagree on not using biased data to estimate SWACs. Regardless, bathymetry studies in-stream highlight the depositional features (which have been conducted by GP and/or FIELDS). The bathymetry studies identified feature which have been sampled. Others have been titled "unidentified hot spots" by GP that could be removed as part of a sediment remedy. Also, moving downstream, they did bias sampling in-stream identifying depositonal features based upon bathymetry and field observation. The same is true in Area 3. There may be a question regarding were there enough samples taken in those features, but there were samples collected.

Jim

-----John Kern <jkern@kernstat.com> wrote: -----

To: JAMES SARIC/R5/USEPA/US@EPA From: John Kern jkern@kernstat.com>

Date: 02/14/2013 05:11PM

Cc: John Kern <a href="mailto:kernstat@gmailto:kernsta

<BUCHOLTZP@michigan.gov>, John Canar/R5/USEPA/US@EPA, kingtw

<KingTW@cdmsmith.com>

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<BUCHOLTZP@michigan.gov>

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John W. Kern PhD Kern Statistical Services, Inc. 5175 NE River RD Sauk Rapids, MN 56379

T: 320-281-0676 C: 509-432-6400

[attachment "Duwamish_final_fs_appH_103112 (1).pdf" removed by JAMES SARIC/R5/USEPA/US]
[attachment "BattelleSWACposter01312009.pdf" removed by JAMES SARIC/R5/USEPA/US]

"Flask, Penny" <Penny.Flask@arcadis-us.co m>

02/15/2013 07:37 AM

To JAMES SARIC

cc Michael Berkoff, Ramon Mendoza, "Bucholtz, Paul (bucholtzp@michigan.gov)", "alfanoj@michigan.gov", "hanshues@michigan.gov", "jkeiser@ch2m.com", "Todd.Goeks@noaa.gov", "jessica.winter@noaa.gov", "Julie.Sims@noaa.gov", "khuibregtse@environcorp.com", "richard.gay@weyerhaeuser.com", "gtgriffi@GAPAC.com", "martin.lebo@weyerhaeuser.com", "gtgriffi@GAPAC.com",

"lcforten@gapac.com", "Erickson, Michael"

bcc

Subject Twelfth Semi-Annual Progress Report (August 2012 to January 2013)

Mr. Saric,

On behalf of Michael Erickson, the Kalamazoo River SRI/FS Twelfth Semi-Annual Progress Report (Aug. 2012 to Jan. 2013) is attached. A hard copy will follow via Federal Express.

Feel free to contact Michael Erickson at 810.225.1924 or michael.erickson@arcadis-us.com if you have any questions or comments.

Thank you.

Penny Flask | Sr. Project Assistant 1 | penny.flask@arcadis-us.com

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"Flask, Penny" <Penny.Flask@arcadis-us.co m>

02/15/2013 09:01 AM

To JAMES SARIC

cc Michael Berkoff, Ramon Mendoza, "Bucholtz, Paul (bucholtzp@michigan.gov)", "alfanoj@michigan.gov", "hanshues@michigan.gov", "jkeiser@ch2m.com", "Todd.Goeks@noaa.gov", "jessica.winter@noaa.gov", "Julie.Sims@noaa.gov", "richard.gay@weyerhaeuser.com", "martin.lebo@weyerhaeuser.com", "khuibregtse@environcorp.com", "gtgriffi@gapac.com",

"lcforten@gapac.com", "Erickson, Michael"

bcc

Subject SRI/FS Monthly Report (January 2013)

Mr. Saric,

On behalf of Michael Erickson, please find attached the Kalamazoo River SRI/FS Monthly Report for January 2013. A hard copy (with Attachment A) will be sent via Federal Express.

Feel free to contact Mr. Erickson at 810.225.1924 or michael.erickson@arcadis-us.com if you have any questions or comments.

Thank you.

Penny Flask | Sr. Project Assistant 1 | penny.flask@arcadis-us.com

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Mike Ribordy /R5/USEPA/US

To "Garbaciak, Steve"

cc Mike Ribordy

bcc

Subject RE: Plainwell

Steve.

The point was to send revised text to Sam and Paul to get their buy in to avoid you making suggested changes only to have me come back and say we don't like them.

Mike Ribordy, NPL Coordinator U.S. EPA Region 5 Remedial Response Branch 77 W. Jackson Blvd. (SR-6J) Chicago, Illinois 60604 Phone: 312-886-4592 ribordy.mike@epa.gov

RE: Plainwell

RE: Plainwell

Garbaciak, Steve to: Mike Ribordy

02/05/2010 10:01 AM

I need an email from you providing the specific wording of the three remaining comments. I don't think it is as hard as you are making it out to be!

Stephen Garbaciak Jr., P.E. | Vice President | steve.garbaciak@arcadis-us.com ARCADIS U.S., Inc. | 30 W. Monroe St., Suite 1710 | Chicago, IL, 60603 T. 312.332.4937 x12 | M. 708.203.0566 | F. 312.332.4424 www.arcadis-us.com Professional Engineer/ PE-IL | PE-MI | PE-MS | PE-NY | PE-OH | PE-WI ARCADIS, Imagine the result

----Original Message----

From: Ribordy.Mike@epamail.epa.gov [mailto:Ribordy.Mike@epamail.epa.gov]

Sent: Friday, February 05, 2010 9:59 AM

To: Garbaciak, Steve Subject: RE: Plainwell

Is this groundhogs day? We just went over the suggested language less than an hour ago.

I'm not really prepared to send anything formal at this time. The Word document was intended to facilitate getting a response back to you. I can work with what I have, but it will take much, much longer. I'm not very good with Adobe Professional. Did I mention it will probably slow the approval process down.

Mike Ribordy, NPL Coordinator U.S. EPA Region 5

Remedial Response Branch 77 W. Jackson Blvd. (SR-6J) Chicago, Illinois 60604 Phone: 312-886-4592 ribordy.mike@epa.gov

RE: Plainwell

Garbaciak, Steve

to:

Mike Ribordy

02/05/2010 09:10 AM

I need to get your suggested language changes from you first before providing the word file. Can you just send them to me in the body of an email?

Stephen Garbaciak Jr., P.E. | Vice President | steve.garbaciak@arcadis-us.com
ARCADIS U.S., Inc. | 30 W. Monroe St., Suite 1710 | Chicago, IL, 60603 T. 312.332.4937 x12 | M. 708.203.0566 | F. 312.332.4424 www.arcadis-us.com
Professional Engineer/ PE-IL | PE-MI | PE-MS | PE-NY | PE-OH | PE-WI ARCADIS, Imagine the result

----Original Message----

From: Ribordy.Mike@epamail.epa.gov [mailto:Ribordy.Mike@epamail.epa.gov]

Sent: Friday, February 05, 2010 8:02 AM

To: Garbaciak, Steve Subject: Re: Plainwell

Steve,

Call went pretty well. Right now there are only 3 of the responses that need a little tweaking. Paul is going to look over the text one more time and we are going to talk to the trustees early next week.

Could you send me a Word version of the redline/strikeout document text.

Thanks

Mike Ribordy, NPL Coordinator U.S. EPA Region 5
Remedial Response Branch 77 W. Jackson Blvd. (SR-6J) Chicago, Illinois 60604
Phone: 312-886-4592
ribordy.mike@epa.gov

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JAMES SARIC/R5/USEPA/US

To khuibregtse

СС

bcc

Subject Weyerhaeuser Kalamazoo Area 2 and 3 sampling update and next steps